



Digitized by the Internet Archive
in 2013

<http://archive.org/details/quarterlystatist00balt>

MARYLAND & RARE BOOK ROOM
UNIVERSITY OF MARYLAND LIBRARY
COLLEGE PARK, MD.



Baltimore. Health Dept. Bureau of Biostatistics.

**BALTIMORE CITY HEALTH DEPARTMENT
RESEARCH AND PLANNING SECTION**

LIBRARY
UNIVERSITY OF MARYLAND
COLLEGE PARK, MD.

QUARTERLY

STATISTICAL

REPORT

Maryland Room
University of Maryland Library
College Park, Md.

MARRIAGES

BIRTHS

MORTALITY

MORBIDITY

FOURTH QUARTER 1958

FEBRUARY 20, 1959 VOL. 10 NO. 4

Baltimore City Health Dept. Research and Planning Section

BALTIMORE CITY HEALTH DEPARTMENT

HUNTINGTON WILLIAMS, M.D.
Commissioner

Maryland
RA
407.4
M4035
FOLIO
vol. 10 no. 4-
vol. 17

RESEARCH AND PLANNING SECTION

MATTHEW TAYBACK, Sc.D.
Director

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation."

Quetelet

The Baltimore Quarterly Statistical Report is prepared by the Bureau of Biostatistics for the purpose of distributing to interested agencies and individuals, a quantitative, up-to-date and cumulative record of health conditions during the current year.

Inquiries concerning the materials published, should be addressed to Mr. Todd M. Frazier, Director, Bureau of Biostatistics, Baltimore City Health Department, Baltimore 3, Maryland.

CONTENTS

	Page
A Summary of Vital Events	1 - 8
B Annual Rates by Month for Births and Selected Causes of Death	9
C Tables of Vital Events	
I Marriages, Births, Deaths by Race	10
II Deaths From Selected Causes	11
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	12

Comments on The Vital Statistics of Baltimore - 1958

Those diseases such as diphtheria, poliomyelitis, whooping cough and smallpox which can be prevented by vaccines or other specific biologicals remained firmly under control in 1958. Public health problems, such as infant mortality and lead poisoning in children whose control is dependent upon the social and economic circumstances of the population and upon the availability of a liberal supply of public health nurses and sanitarians, failed to show evidence of improvement in 1958. The general health level as reflected in the statistics on resident deaths was adversely affected in the first quarter of the year by what is believed to have been the delayed results of Asian influenza which was prevalent in the late months of 1957.

The infant death rate for 1958 was 35.9 deaths per 1000 live born infants, the highest this index has been since 1946. A sharp increase in 1957 in this problem area was attributed to a rise in deaths among nonwhite infants of premature birthweight. In 1958 a further increase was due to a rise of 11 per cent in the death rate among white infants with the 1958 rate 27.6 as contrasted with 24.8 in 1957. No specific factors or disease outbreaks can be found to account for the increase in infant mortality. However, it is reasonable to assume that the difficulty which most hospitals now have in staffing newborn nurseries in accordance with recommended standards of the American Academy of Pediatrics, the lack of sufficient and qualified nursing personnel on obstetrical services of those hospitals with a large volume of medically indigent patients and the growing number of women who fail to receive prenatal care early in pregnancy, are the principal reasons for the unfortunately high loss of life now experienced by infants born to Baltimore City residents.

Lead poisoning in children took the lives of 10 youngsters, the highest annual toll from this disease within the past twenty year period. A total of 132 children, ill from lead poisoning due to the eating of paint was reported to the

City Health Department in 1958. This also constitutes a new record high in this respect, and is more than twice the annual number of cases reported in recent years: 58, in 1957; 48, in 1956; and 35, in 1955. The removal of leaded paint from the reach of children, 12 to 36 months of age, is the obvious effective method for control of this preventable cause of serious brain damage to pre-school aged children. Responsible parents and responsible landlords have it within their power to curb this threat to the children of Baltimore.

The death rate in 1958, 11.6 per 1000 population, was very close to the figure of 11.7 for 1957. In both years, a high incidence of respiratory disease produced an excess of mortality as contrasted with the more favorable three year period 1954-1956, during which the average annual death rate was 11.1 per 1000. Among the diseases, the control of which is a specific function of the health department, the incidence of whooping cough reached a record low with only 35 cases reported. Since 1947, when the pertussis vaccine was introduced, the number of cases of whooping cough of sufficient severity to require medical attention and notification to the health department has followed a remarkably downward trend, so much so, that a case of whooping cough should soon become a rarity, and in the same class as diphtheria.

Population

Censuses which were taken in the past three years in New York City and in the District of Columbia provide evidence that the populations in these central cities of important metropolitan areas are declining. These findings as well as a wide range of data are carefully reviewed by the Bureau of Biostatistics in estimating population changes in Baltimore City.

The number of residents of Baltimore City on July 1, 1958 was estimated as 982,000, an increase of 3,000 when compared with the 1957 estimate of 979,000. Once again, the number of white residents declined; from 688,000 in 1957 to 681,000 in 1958, a loss of 1 per cent annually. Offsetting this trend which has

been continuous since the end of World War II, the number of nonwhite residents has increased in a spectacular manner. In 1958, the Negro population was estimated at 301,000, up 10,000 from the figure of 291,000 in 1957, and 75,000 greater than the 1950 nonwhite population as enumerated by The Bureau of The Census. Two predictions appear reasonable at this time: The total city population will stabilize at approximately the present level. The Negro population will grow at a rate not less than $2\frac{1}{2}$ per cent annually, while the white population declines in numbers equal to the numerical increase in Negro residents.

It has been customary to regard the eventual population of Baltimore City as being somewhere between 1,150,000 and 1,250,000 residents. This "target" seems exaggerated at this time. The net effect of redevelopment is to reduce the number of dwelling units in the city. Rehabilitation, if effective, should reduce density. Changing patterns of land usage are resulting in a significant reduction of residential units through conversion for commercial occupancy. It is reasonable to expect that the population when next enumerated by The Bureau of The Census in 1960 will not exceed 1,000,000. Those agencies, government, commercial, health and welfare, which are concerned with services to residents of the city will need to accustom themselves to the concept of a stable rather than a growing population, although the changing geographic distribution and the age, racial, social and economic composition of the community will still demand unusual ingenuity and flexibility in administrative planning.

Without question, the dominant demographic event in this city, is the outmigration by native white Baltimore residents to Baltimore and Anne Arundel Counties and their replacement by nonwhite residents, either through immigration or by natural growth, and by white immigrants from the South. The relatively depressed economic level of the expanding nonwhite population results in an increase of persons in need of such public services as Aid to Dependent Children

and of publicly supported hospital and public health services, and requires an increase in police and other crime control activities.

It is a challenge to responsible civic minded groups to determine how such depressed groups can be supported so that the younger generations now growing in deprived environments can reach a level of productive adulthood. Certainly the exceptional public financial burden these groups represent should be equitably distributed across a broader population base than the city itself.

Maternal and Child Health

There were 24,299 births to Baltimore City residents in 1958, a decline of 3 per cent from the record high of 25,067 in 1957. The total number of live births delivered in Baltimore hospitals was 39,600, which approximates closely the number of 39,680 recorded in the previous year. This should give the obstetrical facilities a relative breathing spell in what has been an almost impossible task of accommodating a slow growth in obstetrical beds to a rapid upsurge in obstetrical admissions.

The resident nonwhite birth rate at 36.4 per 1000 population was 86 per cent higher than the white rate of 19.6. The infant mortality rate in 1958 was 35.9, the highest it has been since 1946. The lowest rate was achieved in 1950 and was 27.2. In 1958, 874 infants of Baltimore City residents died. Had the 1950 rates prevailed in 1958, 168 infant lives would have been saved. This is one area of public health which gives evidence of steady deterioration.

The maternal mortality record remains satisfactory. In 1958, there were 15 deaths ascribed to maternal causes, 12 among nonwhite mothers and 3 among white mothers. The maternal mortality rate was 6.2 per 10,000 live births. The lowest rate achieved previously was 3.1 in 1953.

Tuberculosis

Residents of Baltimore City occupy approximately 1000 beds in tuberculosis hospitals of various types. The cost to the public of this hospital care exceeds \$2,500,000 annually. The average case of tuberculosis whose hospitaliza-

tion can be prevented saves the public no less than \$3,000. The procedures used for such preventive work include (1) reduction of the open reservoir of infection in the community through hospitalization of those residents who are active cases of pulmonary tuberculosis and thus foci of infection for their friends and family associates (2) finding cases through mass x-ray programs which are designed to discover tuberculosis in early form so that chemotherapy may be sufficient without hospitalization or with a reduced length of stay in an institution (3) careful supervision and examination of family contacts of known cases (4) vaccination with the BCG vaccine of persons who are known to be subject to high risk to infection and who are tuberculin negative (give no evidence of previous infection).

In 1958, there were 870 new cases of active tuberculosis reported to the health department as contrasted with 991 cases of similar type in 1957. This represents a reduction of 12 per cent in those cases which are of significance from a public health point of view. The number of cases in the white population dropped 17 per cent to 374 while the nonwhite active cases in 1958 which numbered 496, declined 7 per cent from 1957.

The number of deaths ascribed to tuberculosis in 1958 was 182 or a rate of 18.5 per 100,000 population, a 12 per cent reduction from the 1957 rate of 21.1 which was unfavorably affected by the presence of Asian influenza. The outlook for tuberculosis in Baltimore City is one of gradual decline in the number of new cases reported each year. However, Baltimore lags behind the remainder of the nation's large cities in its tuberculosis experience. It has the highest death rate and one of the highest morbidity rates. In order to accelerate the decline in tuberculosis an expert committee was convened by the Commissioner of Health early in 1958. Its report was rendered in December. Although it seems unlikely that the 1959 appropriations for the health department will permit implementation of the committee's major recommendations, several changes designed to improve the effectiveness of the control program will be undertaken.

Other Communicable Diseases

Mention has been made of the record low reported incidence of whooping cough in 1958, 35 cases. Typhoid fever, with 2 non-fatal cases reported, was also at its lowest level. Mumps, which generally runs a biennial cyclic course, was unusually low in incidence in 1958 with 285 cases reported, the lowest on record since 1949. It is likely that the coming year may see a high level of infection with this disease because of the low frequencies experienced in the past two years. An exceptionally high number of cases of German measles was recorded in 1958. Reports were received of 1,280 cases with peak occurrence in April. The Bureau of Biostatistics estimates that the true number of cases was no less than 13,000, since many incidents are not medically attended nor recognized and thus not reported to the health department. Infectious hepatitis, another disease which often goes unrecognized, was unusually prevalent in the southern area of the city. Reports were received for 125 cases, the highest number since 1952.

Poliomyelitis with 11 paralytic cases in 1958 was up somewhat from the low figure of 7 in 1957. Since the vaccine is not 100 per cent effective, such levels are considered consistent with adequate control of this disease.

The discovery of penicillin provided a powerful weapon against the unusually destructive effects of syphilis. The course of this disease can be followed by observing (1) the number of deaths ascribed to syphilis, which is an index of untreated syphilis acquired many years ago (2) the number of cases reported of primary and secondary syphilis which is an index of recently acquired infection and (3) the number of cases of congenital syphilis which is an index of untreated syphilis in pregnant women. The 1958, 1957 and 1948 experience for each of these indices is shown on the following page.

	Deaths From Syphilis	Primary and Secondary Syphilis	Congenital Syphilis
1958	48	195	36
1957	55	239	31
1948	182	1,171	151

In each instance, in spite of substantial growth in the susceptible components of the population, there is evidence of an obvious sharp decline in the extent of newly acquired syphilis and in the more advanced sequelae of the disease. There is no reason to believe that these trends are due to a reduction in promiscuous sexual conduct for the cases of gonorrhea continue at a high and relatively constant level. It is thought that the high dosage of penicillin used in the treatment of gonorrhea may in a significant number of cases prove sufficient to prevent the progress of a concurrent syphilitic infection.

Principal Causes of Death

Diseases of the cardiovascular system and cancer continue to dominate the scene as the important causes of death. Fifty per cent of deaths are due to the diseases of the cardiovascular system, and another fifteen per cent are due to cancer. The number of deaths ascribed to these causes shows little change over the years. Influenza and pneumonia, important causes of death prior to the discovery of the antibiotics, dropped to comparative insignificance by 1950 when a low of 259 resident deaths was recorded, a rate of 27.3 per 100,000 population. Since then, however, the trend has been upward, and in 1958, there were 415 deaths among residents attributed to influenza and pneumonia, a rate of 42.3. An increasing number of these deaths is due to the staphylococcus, an organism with considerable resistance to the more common antibiotics. This problem has been recognized as one of national scope and is under active study by several research teams.

Automobile Accidents

In 1958, there were 139 fatal automobile deaths among residents of Baltimore City. In addition it is estimated that within the city, 7,700 persons were injured as a result of automobile accidents. Stated otherwise one out of each 125 residents was injured by an automobile accident in 1958.

Summary

Adverse factors affecting the health of residents of Baltimore City in 1958 included, a high rate of respiratory disease and increased death rate from pneumonia early in the year, and a poor record in connection with the survivorship of babies of premature birthweight. Several areas of progress included the attainment of record low levels in the incidence of whooping cough and typhoid and a 12 per cent decline in newly reported active tuberculosis cases.

The changing social and economic characteristics of the population is a matter for great concern since it inevitably results in marked need for expansion of prenatal, well baby, and school health services.

The restricted Health Department appropriations provided by the 1959 Ordinance of Estimates will make it difficult to bring to the community the full benefit of known techniques for the control of known public health hazards. The adjustments to be undertaken will be designed to bring to the population the maximum benefits possible under the limitations of the appropriations that are available.

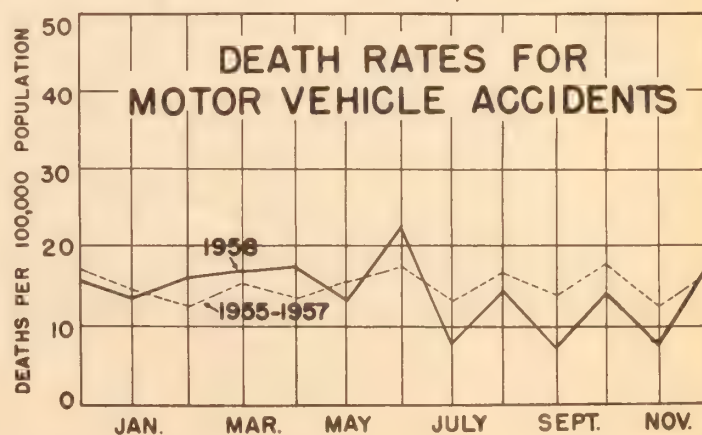
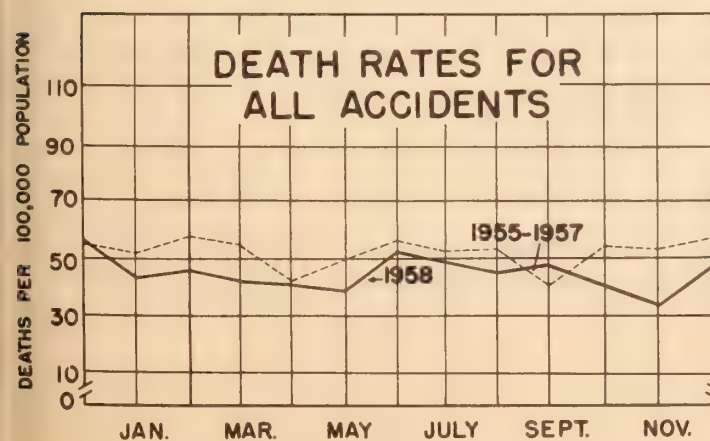
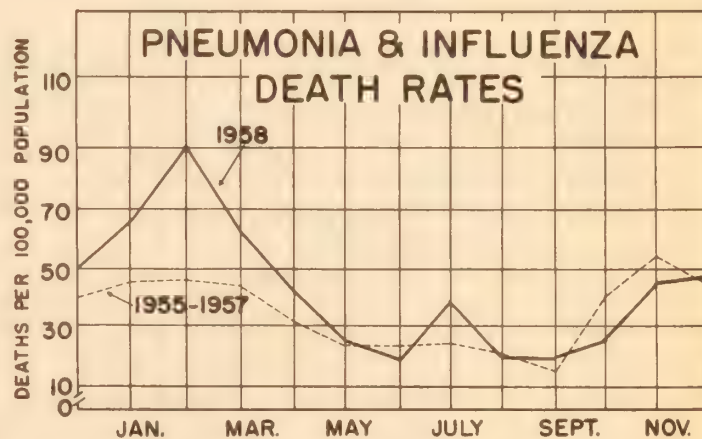
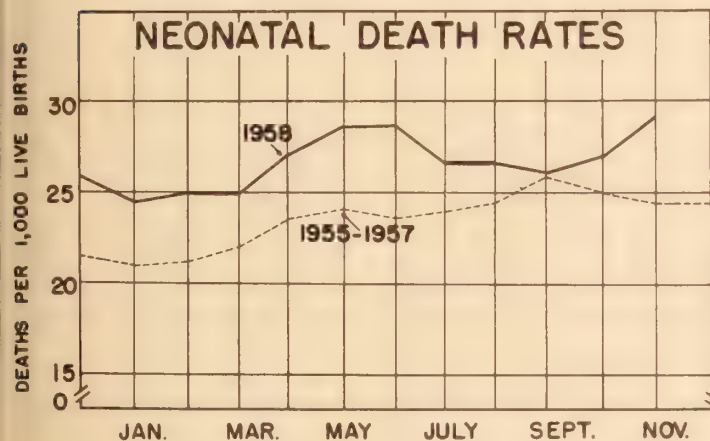
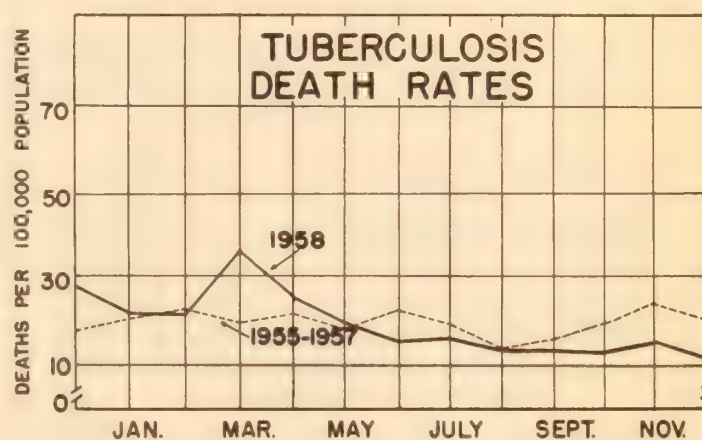
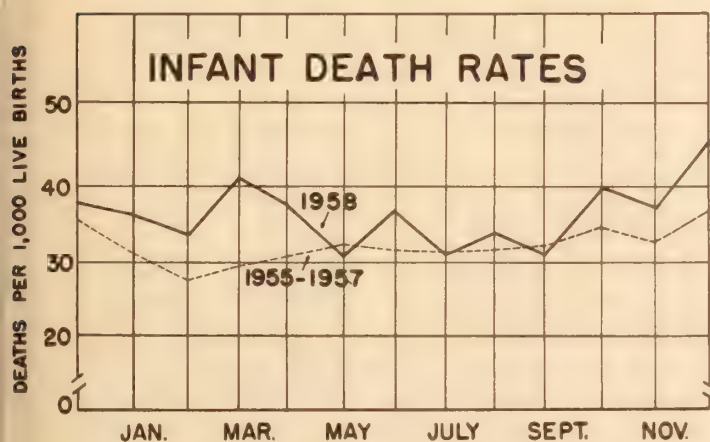
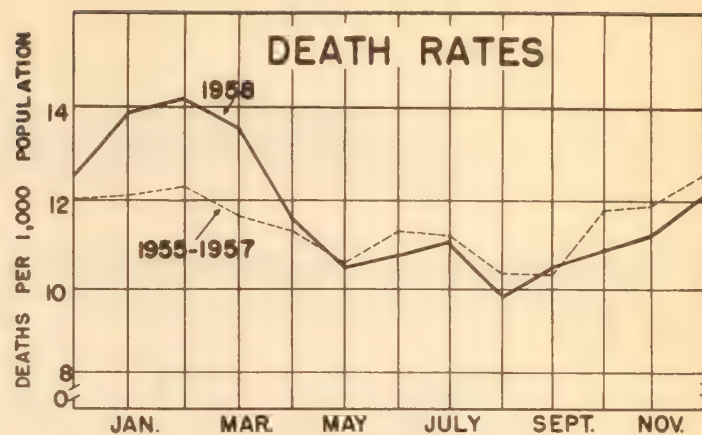
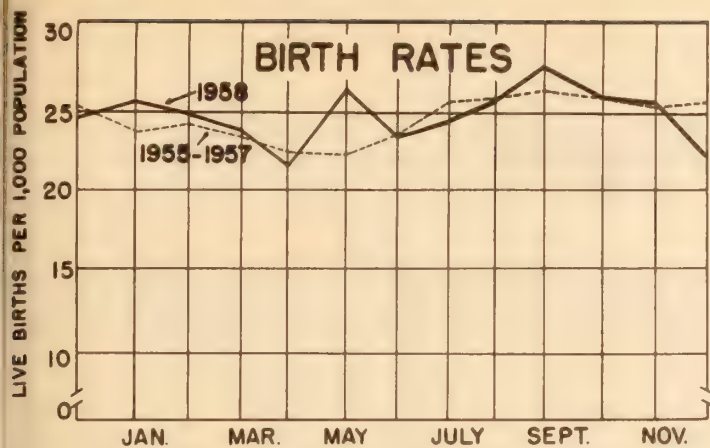


TABLE I

MARRIAGES RECORDED, RESIDENT BIRTHS, DEATHS AND INFANT DEATHS
AND CORRESPONDING RATES BY RACE: FOURTH QUARTER, 1958 and 1955-1957

Vital Event	October - December				January - December	
	Number		Rate*		Rate*	
	1958	Average 1955-57	1958	Average 1955-57	1958	Average 1955-57
		All Races				
Marriages recorded.	2,269	2,594	9.2	10.6	9.5	11.2
Births.....	6,052	6,321	24.5	25.8	24.7	24.7
Deaths, all causes.....	2,831	2,963	11.4	12.1	11.6	11.4
Deaths, under one year.....	245	219	40.4	34.7	35.9	31.9
under 28 days.....	177	154	29.2	24.4	27.3	23.5
28 days-11 months....	68	65	11.2	10.3	8.6	8.4
		White				
Marriages recorded.....	1,430	1,706	8.3	9.7	8.9	10.6
Births.....	3,251	3,749	18.9	21.4	19.6	20.5
Deaths, all causes.....	1,923	2,144	11.2	12.3	11.8	11.7
Deaths, under one year.....	90	93	27.7	24.8	27.6	24.1
under 28 days.....	64	67	19.7	17.9	20.5	18.1
28 days-11 months....	26	26	8.0	6.9	7.1	6.0
		Nonwhite				
Marriages recorded.....	839	888	11.1	12.6	11.0	12.7
Births.....	2,801	2,572	36.9	36.6	36.4	35.2
Deaths, all causes.....	908	819	12.0	11.7	11.3	10.8
Deaths, under one year.....	155	126	55.3	49.0	46.1	43.3
under 28 days.....	113	87	40.3	33.8	35.6	31.5
28 days-11 months....	42	39	15.0	15.2	10.5	11.8

*Infant mortality rates are per 1,000 live births. All other rates -- marriage, birth and death -- are on an annual basis per 1,000 population estimated as of July 1, 1958-- total 982,000; white, 681,000; nonwhite, 301,000.

TABLE II

RESIDENT DEATHS FROM SELECTED CAUSES
FOURTH QUARTER, 1958 and 1955-57

Cause of Death	October - December				January - December	
	Number		Rate per 100,000*		Rate per 100,000*	
	1958	Average 1955-57	1958	Average 1955-57	1958	Average 1955-57
All Causes	2,831	2,963	11.4	12.1	11.6	11.4
Tuberculosis (001-019).....	32	51	12.9	20.8	18.5	19.7
Syphilis (020-029).....	12	16	4.8	6.5	4.9	6.0
Cancer (140-205).....	435	475	175.7	193.7	183.9	185.7
Diabetes Mellitus (260).....	37	65	14.9	26.5	22.4	24.9
Vascular Lesions of the Central Nervous System (330-334).....	222	221	89.7	90.1	88.7	90.1
Diseases of the Heart (410-443).....	1,211	1,239	489.3	505.2	488.9	483.7
Influenza and Pneumonia (480-483, 490-493).....	98	115	39.6	46.9	42.3	34.5
Nephritis and Nephrosis (590-594).....	36	26	14.5	10.6	11.1	10.8
Puerperal Causes (640-652, 670-689).....	3	3	1.2	1.2	1.5	1.2
Congenital Malformations (750-759).....	24	33	9.7	13.5	11.6	13.8
Certain Diseases of Early Infancy (760-776).....	167	133	67.5	54.2	61.1	49.9
Suicides (963, 970-979).....	16	23	6.5	9.4	9.6	10.1
Homicides (964, 980-999).....	20	22	8.1	9.0	10.7	8.5
Accident (800-802, 810-835, 840-962)...	100	134	40.4	54.6	43.8	51.9
Motor Vehicle (810-835).....	33	39	13.3	15.9	14.2	15.2

*Rates shown for all cases are per 1,000 population.

Table III

CASES AND DEATHS FROM SELECTED CAUSES, AND INFANT DEATHS BY HEALTH DISTRICTS
FOURTH QUARTER, 1958 and 1955-1957 AVERAGE

	*Total City		Eastern		Southeastern		Southern		Western		Druid		Northwestern	
	1958	Average 1955-57	1958	Average 1955-57	1958	Average 1955-57	1958	Average 1955-57	1958	Average 1955-57	1958	Average 1955-57	1958	Average 1955-57
Cause of Illness and Death														
Infant deaths	245	219	88	68	23	19	22	18	33	32	53	50	23	31
Tuberculosis Cases all forms Deaths	195 32	271 51	64 10	87 13	22 4	32 7	17 3	23 4	24 4	30 6	48 7	62 17	20 3	36 3
Syphilis Cases Deaths	340 12	342 16	100 2	92 4	20 2	12 0.6	15 0	19 0.6	38 1	35 4	120 5	146 5	42 2	30 1.3
Typhoid Cases Deaths	1 0	0.6 0	0 0	0.3 0	0 0	0 0	0 0	0 0	0 0	0.3 0	1 0	0 0	0 0	0 0
Diphtheria Cases Deaths	0 0	0.3 0.3	0 0	0.3 0.3	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Whooping Cough	9 0	24 0	6 0	12 0	0 0	1 0	2 0	1 0	1 0	1 0	0 0	8 0	0 0	1 0
Meningo- coccal infections	5 1	6 2.3	2 1	2.7 1	1 0	0 0	1 0	0.3 0	0 0	0.3 0	1 0	1.6 1	0 0	1 0.3
Measles Cases Deaths	164 1	648 0.3	135 1	292 0.3	14 0	30 0	1 0	55 0	3 0	56 0	1 0	127 0	10 0	87 0
Acute polio- myelitis (paralytic)	7 0	9.6 0.6	2 0	3.6 0.3	0 0	0.6 0	3 0	0.6 0	1 0	1.6 0	0 0	1.6 0	1 0	1.3 0.3

All figures corrected for residence within Maryland.

*Totals include some intrastate transfers allocated to Baltimore City but not otherwise allocated to health districts.

Harvard University
University of Michigan
College Park, MD

BALTIMORE CITY HEALTH DEPARTMENT
RESEARCH AND PLANNING SECTION

Maryland Room
University of Maryland Library
College Park, Md.

QUARTERLY

STATISTICAL

REPORT

MARRIAGES

BIRTHS

MORTALITY

MORBIDITY

Maryland Room
University of Maryland Library
College Park, Md.

FIRST & SECOND QUARTERS 1959

AUGUST 14, 1959 VOL. II NOS. 1 & 2

BALTIMORE CITY HEALTH DEPARTMENT

HUNTINGTON WILLIAMS, M.D.
Commissioner

RESEARCH AND PLANNING SECTION

MATTHEW TAYBACK, Sc.D.
Director

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation."

Quetelet

The Baltimore Quarterly Statistical Report is prepared by the Bureau of Biostatistics for the purpose of distributing to interested agencies and individuals, a quantitative, up-to-date and cumulative record of health conditions during the current year.

Inquiries concerning the materials published, should be addressed to Mr. Todd M. Frazier, Director, Bureau of Biostatistics, Baltimore City Health Department, Baltimore 3, Maryland.

Contents

	Page
A Summary of Vital Events	1 - 2
B Annual Rates by Month for Births and Selected Causes of Death	3
C Tables of Vital Events	
<u>First Quarter</u>	
I Marriages, Births, Deaths by Race	4
II Deaths From Selected Causes	5
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	6
<u>Second Quarter</u>	
I Marriages, Births, Deaths by Race	7
II Deaths From Selected Causes	8
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	9
D Well Baby Clinic Survey - 1957	10 - 22

Vital Events - Baltimore, Maryland

January-June, 1959

Marriages and Births

A total of 4,708 marriages were recorded in Baltimore City during the first six months of 1959. This is an increase of 248 over the first six months of 1958.

In the first half of this year there were 11,661 resident births, of which 6,127 were white and 5,534, or 47 per cent, were Negro. The birth rate among Negro residents, 37.1 per 1000 population, was twice as large as the rate of 18.1 noted for white residents for the first half of the year. Since 1950 the demand imposed upon the obstetrical facilities available to Negro residents has increased 66 per cent - from 3,338 deliveries in the first six months of 1950 to the current six month experience of 5,534 births. The number of obstetrical beds available to Negro residents has not kept pace with this rapidly increasing demand.

Mortality

During the first half of 1959 there were 5,695 resident deaths for a rate of 11.7 per 1000. This is a 5 per cent decrease from the 6,012 deaths experienced in the first half of 1958. There were fewer tuberculosis and heart disease deaths this year than in the first six months of 1958 when the latent effects of Asian influenza were noted.

Infant and Maternal Mortality

Infant and neonatal mortality rates decreased slightly during the first half of 1959. The neonatal mortality rate for Negroes dropped from 34.4 to 30.5 per 1000 live births. Although this is an improvement over the record of the past two years it is still considerably higher than the rates of 26 and 27 deaths per 1000 live births that were attained in the early 1950's. Only four deaths due to puerperal causes were reported in the first half of 1959.

Morbidity

During the first quarter of 1959 an outbreak of infectious hepatitis spread through Baltimore with reported cases reaching a record high of 143. In 1957, 21 cases were reported. In 1958, a rapid increase in the last quarter brought the total to 123 for the year. The 143 cases in the first quarter of 1959, followed by 57 in the second quarter, mark this as an all time high. Although the recent outbreak spread into 53 of the city's 168 census tracts, the O'Donnell Heights Public Housing Project, with 26 cases, and the Brooklyn Public Housing Project, with 19 cases, were focal points in the occurrence of this disease.

Table III shows an increase of 40 to 50 per cent in the number of cases of syphilis reported in the first two quarters of 1959 compared to the previous three year average for the same months. Thus, instead of the 628 cases of syphilis expected for this period, 932 have been reported. This does not represent a community-wide increase in the prevalence of syphilis but rather improved reporting procedures between the health department, private physicians, and hospitals.

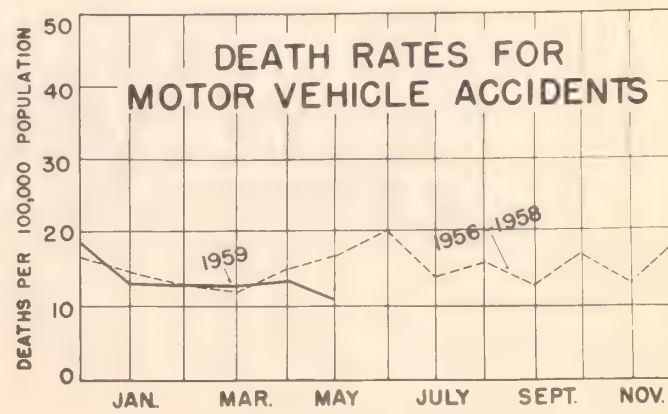
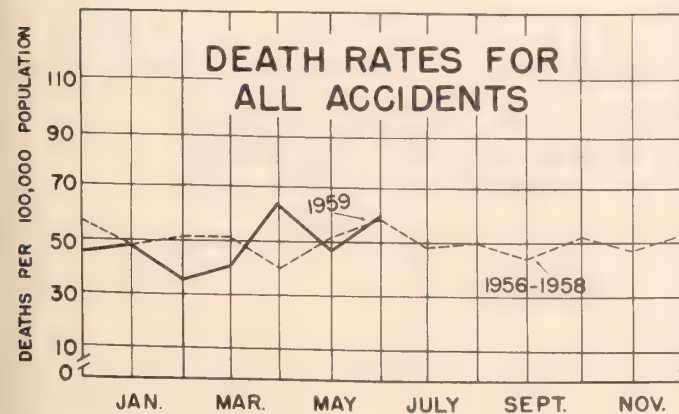
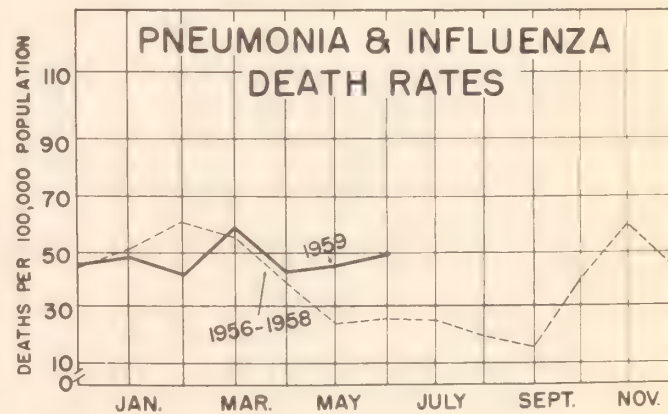
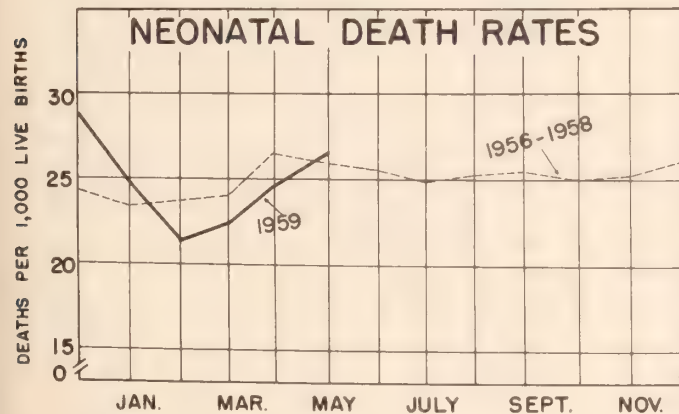
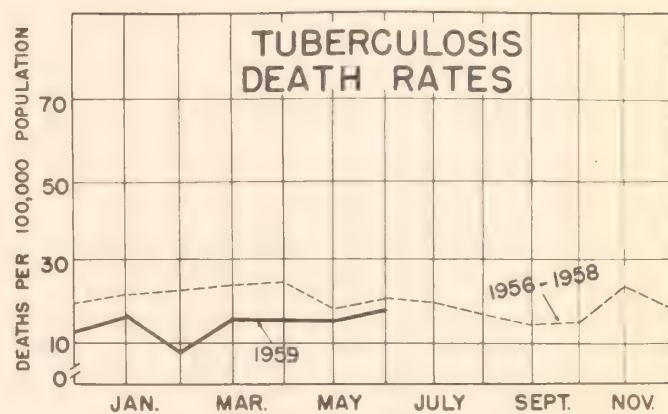
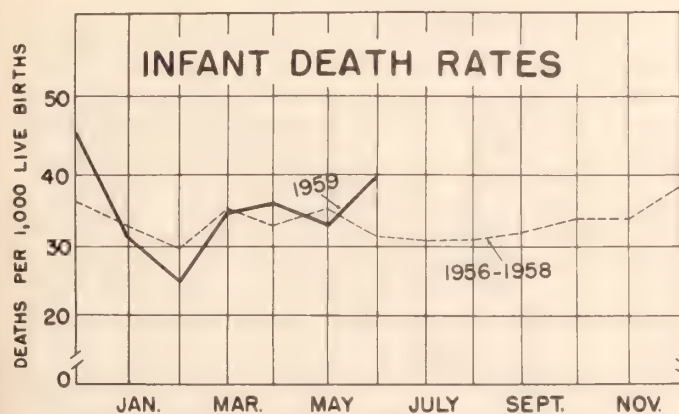
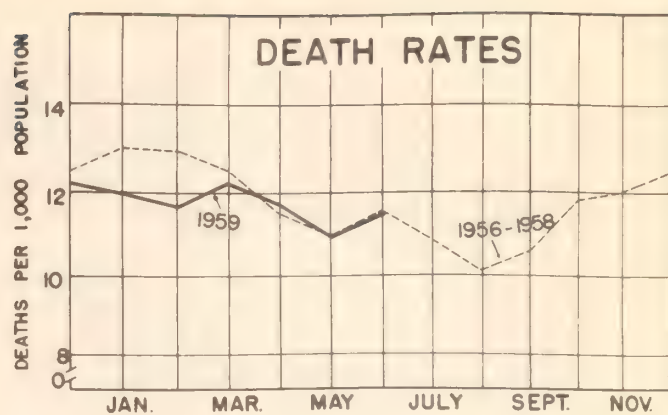
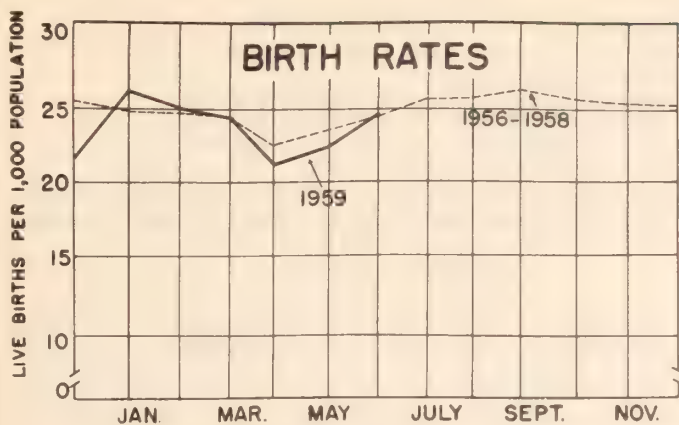


Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: First Quarter, 1959 and 1956-1958

Vital Event	JANUARY - MARCH			
	Number		Rate*	
	1959	Average 1956-58	1959	Average 1956-58
	All Races			
Marriages recorded.....	2,043	2,199	8.4	9.2
Births.....	6,092	5,861	25.2	24.4
Deaths, all causes.....	2,909	3,066	12.0	12.8
Deaths, under one year.....	185	193	30.4	32.9
under 28 days.....	131	139	21.5	23.7
28 days-11 months.....	54	54	8.9	9.2
White				
Marriages recorded.....	1,247	1,428	7.4	8.4
Births.....	3,253	3,364	19.4	19.8
Deaths, all causes.....	2,070	2,215	12.3	13.1
Deaths, under one year.....	75	88	23.0	26.1
under 28 days.....	57	64	17.5	19.0
28 days-11 months.....	18	24	5.5	7.1
Nonwhite				
Marriages recorded.....	796	771	10.7	10.9
Births.....	2,839	2,497	38.3	35.4
Deaths, all causes.....	839	851	11.3	12.1
Deaths, under one year.....	110	105	38.7	42.0
under 28 days.....	74	75	26.1	30.0
28 days-11 months.....	36	30	12.6	12.0

*Infant mortality rates are per 1000 live births. All other rates—marriage, birth and death—are on an annual basis per 1000 population estimated as of July 1, 1958—total population 982,000; white, 681,000; nonwhite, 301,000.

Table II

Resident Deaths From Selected Causes
First Quarter, 1959 and 1956-1958

Cause of Death	JANUARY - MARCH			
	Number		Rate Per 100,000*	
	1959	Average 1956-58	1959	Average 1956-58
All Causes.....	2,909	3,066	12.0	12.8
Tuberculosis (001-019).....	32	55	13.2	22.9
Syphilis (020-029).....	11	14	4.5	5.8
Cancer (140-205).....	450	456	185.8	190.0
Diabetes mellitus (260).....	59	70	24.4	29.2
Vascular lesions of the central nervous system (330-334).....	243	237	100.3	98.7
Diseases of the heart (410-443).....	1,284	1,343	530.3	559.5
Influenza and pneumonia (480-483, 490-493).....	120	134	49.5	55.8
Nephritis and nephrosis (590-594).....	22	23	9.1	9.6
Puerperal causes (640-652, 670-689).....	3	5	1.2	2.1
Congenital malformations (750-759).....	17	31	7.0	12.9
Certain diseases of early infancy (760-776).....	122	121	50.4	50.4
Suicides (963, 970-979).....	26	24	10.7	10.0
Homicides (964, 980-999).....	15	18	6.2	7.5
Accidents (800-802, 810-835, 840-962).....	102	122	42.1	50.8
Motor vehicles (810-835).....	32	34	13.2	14.2

*Rates shown for all causes are per 1000 population.

TABLE III

CASES AND DEATHS FROM SELECTED CAUSES AND INFANT DEATHS BY HEALTH DISTRICTS
FIRST QUARTER, 1959 and 1956-1958 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Southeastern		Southern		Western		Dread		Northwestern	
	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58
Infant deaths	185	193	57	60	14	20	18	20	31	26	39	39	25	28
Tuberculosis all forms	224 32	251 55	62 14	73 15	22 2	33 8	27 7	21 5	33 3	30 8	51 5	66 14	29 3	28 5
Syphilis Deaths	403 11	289 15	114 2	63 3	29 0	14 1	22 0	16 2	41 3	39 2	137 8	136 5	49 0	19 2
Typhoid fever	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Diphtheria	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Whooping cough	7 0	20 0	4 0	11 0	0 0	2 0	0 0	1 0	2 0	0 0	1 0	5 0	0 0	2 0
Meningococcal infections	7 3	23 06	1 0	1 03	0 0	03 0	3 0	0 0	3 1	06 03	2 2	0 0	0 0	03 0
Measles	327 2	2196 1	191 0	836 03	16 0	310 0	17 1	111 0	26 0	194 03	15 0	375 0	62 0	370 03
Acute polio- myelitis (paralytic)	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

All figures reported for residence within Maryland

*Totals include some transfers allocated to Baltimore City but not otherwise allocated to Health Districts

Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Second Quarter, 1959 and 1956-1958

Vital Event	APRIL - JUNE				JANUARY - JUNE	
	Number		Rate*		Rate*	
	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58
	All Races					
Marriages recorded.....	2,665	2,848	10.9	11.7	9.7	10.4
Births.....	5,569	5,660	22.7	23.3	23.9	23.9
Deaths, all causes.....	2,786	2,743	11.4	11.3	11.7	12.0
Deaths, under one year.....	203	188	36.5	33.2	33.3	33.1
under 28 days.....	149	146	26.8	25.8	24.0	24.7
28 days-11 months...	54	42	9.7	7.4	9.3	8.4
White						
Marriages recorded.....	1,779	1,983	10.5	11.6	9.0	10.0
Births.....	2,874	3,252	16.9	19.0	18.1	19.4
Deaths, all causes.....	1,985	1,988	11.7	11.6	12.0	12.3
Deaths, under one year.....	77	85	26.8	26.1	24.8	26.1
under 28 days.....	54	66	18.8	20.3	18.1	19.6
28 days-11 months...	23	19	8.0	5.8	6.7	6.5
Nonwhite						
Marriages recorded.....	886	865	11.8	12.1	11.3	11.5
Births.....	2,695	2,408	35.9	33.8	37.1	34.6
Deaths, all causes.....	801	755	10.7	10.6	11.0	11.3
Deaths, under one year.....	126	103	46.8	42.8	42.6	42.6
under 28 days.....	95	80	35.3	33.2	30.5	31.6
28 days-11 months...	31	23	11.5	9.6	12.1	11.0

*Infant mortality rates are per 1000 live births. All other rates—marriage, birth and death—are on an annual basis per 1000 population estimated as of July 1, 1958—total population 982,000; white, 681,000; nonwhite, 301,000.

Table II

Resident Deaths From Selected Causes
Second Quarter, 1959 and 1956-1958

	APRIL - JUNE				JANUARY - JUNE	
	Number		Rate Per 100,000*		Rate Per 100,000*	
	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58
All Causes	2,786	2,743	11.4	11.3	11.7	12.0
Tuberculosis (001-019).....	38	51	15.5	21.0	14.4	21.9
Syphilis (020-029).....	9	11	3.7	4.5	4.1	5.2
Cancer (140-205).....	476	460	194.4	189.5	190.2	189.7
Diabetes mellitus (260).....	61	63	24.9	25.9	24.6	27.5
Vascular lesions of the central nervous system (330-334).....	211	208	86.2	85.7	93.2	92.2
Diseases of the heart (410-443).....	1,147	1,142	468.5	470.5	499.2	514.7
Influenza and pneumonia (480-483, 490-493).....	112	73	45.7	30.1	47.6	42.9
Nephritis and nephrosis (590-594).....	28	25	11.4	10.3	10.3	9.9
Puerperal causes (640-652, 670-689).....	1	2	0.4	0.8	0.8	1.4
Congenital malformations (750-759).....	29	33	11.8	13.6	9.4	13.2
Certain diseases of early infancy (760-776).....	130	128	53.1	52.7	51.7	51.8
Suicides (963, 970-979).....	19	27	7.8	11.1	9.2	10.6
Homicides (964, 980-999).....	15	27	6.1	11.1	6.2	9.3
Accidents (800-802, 810-835, 840-962).....	139	125	56.8	51.5	49.5	51.2
Motor Vehicle (810-835).....	35	42	14.3	17.3	13.8	15.9

*Rates shown for all causes are per 1000 population.

TABLE III

CASES AND DEATHS FROM SELECTED CAUSES, AND INFANT DEATHS BY HEALTH DISTRICTS
SECOND QUARTER 1959 AND 1956-1958 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Southeastern		Southern		Western		Druid		Northwestern	
	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58
Infant deaths	203	187	65	60	19	18	22	19	33	24	37	42	25	24
Tuberculosis Cases Deaths	264 38	293 51	75 13	82 14	59 8	40 8	21 4	27 4	37 5	36 5	68 6	79 16	23 1	28 4
Syphilis Cases Deaths	530 9	339 10	142 4	73 2	42 0	21 2	21 1	16 0	56 0	36 1	187 2	167 4	68 1	21 1
Typhoid Cases Deaths	0 0	0.3 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0.3 0	0 0	0 0
Diphtheria Cases Deaths	0 0	0.3 0.3	0 0	0 0	0 0	0.3 0.3	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Whooping cough Cases Deaths	13 0	28 0.3	0 0	14 0.3	5 0	3 0	1 0	2 0	1 0	1 0	1 0	4 0	5 0	4 0
Meningococcal Cases Deaths	1 1	4.3 1.3	0 0	1 0.3	1 1	0.3 0	0 0	0.6 0	0 0	1.3 0.3	0 0	0.6 0.6	0 0	0.3 0
Measles Cases Deaths	498 1	623 0	134 0	204 0	52 0	75 0	56 1	40 0	66 0	62 0	70 0	90 0	119 0	152 0
Acute poliomyelitis (paralytic) Cases Deaths	0 0	0.3 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0.3 0	0 0	0 0

All figures corrected for residence within Maryland

*Totals include some transfers allocated to Baltimore City but not otherwise allocated to Health Districts.

Well Baby Clinic Survey, 1957*

Summary

These are the characteristics of the Well Baby Clinic population. About nine out of ten children seen in Well Baby Clinics are under age three; two-thirds are nonwhite. The average family size was five persons. The median reported income was \$64 per week. About five per cent of the respondents received welfare grants; 15 per cent were presumably medically indigent, and the remaining 80 per cent were above the maximum income level for medical indigency. These characteristics provide quantitative data needed in evaluating the Well Baby Clinic Program.

The overall impression is that the majority of persons who use these clinics are not well-to-do, nor, on the other hand, are they medically indigent. The major part of this population is in a grey zone bounded on one hand by indigent persons and on the other by families with adequate resources for private pediatric care.

The information obtained from this survey can be used in two ways:

- (1) To evaluate the present program with regard to an optimal relocation of existing clinic facilities; or
- (2) To establish a payment plan for families above the status of medical indigency.

Both uses assume a fixed investment of public monies in Well Baby care. Apart from small gains that can be made in relocation, the first of these two approaches will ultimately lead to a reduction in the quality of care given as the population served increases. The second method, which involves the administration of a means test, may be one way in which a fixed investment of tax monies can provide adequate Well Baby care to an increasing number of infants.

*Todd M. Frazier, Sc.M., Director, Bureau of Biostatistics, Baltimore City Health Department.

The tables and figures in this report and the extensive tabulations contained in the appendix were prepared by Mrs. Barbara Lambert, Statistician, Research and Planning Section.

Well Baby Clinic Survey - 1957

Introduction

In June 1957, the Bureaus of Maternal and Child Hygiene, Public Health Nursing, and Biostatistics cooperated in a survey of persons who bring children to the Well Baby Clinics of the Baltimore City Health Department. The purpose of this survey was to provide source data for the evaluation of the economic characteristics of the existing Well Baby Clinic program.

Two public health nurses in each of the six health districts were recruited for interviewing and were instructed in the use of the survey questionnaire. The interviewed sample consisted of parents, grandparents, other relatives, and non-related persons who brought children to regular Well Baby Clinic sessions. At least one clinic session was surveyed in each of thirty-five clinics.

Although the survey questionnaire includes descriptive items such as age, race, and sex, the emphasis of this report is concerned primarily with income and family size, information that can be used in program planning.

Results

The results of this survey are presented in two parts. The first concerns the general characteristics of the sample surveyed, and the second, the income and dependency status of interviewed persons. Detailed statistics for each of the clinics and for each health district are available.

General Characteristics

A total of 1,401 interviews were conducted by public health nurses during this survey. The age distribution of children seen at health district Well Baby Clinics during the survey is shown in Table 1A. Nearly 91 per cent of the children attending these clinics were under age three; about 8 per cent between the ages of three and eight; and, 1.6 per cent of unknown or unrecorded age. This age distribution is fairly consistent for all six health districts.

Approximately two-thirds of the children seen at the surveyed sessions were nonwhite. The number of children and the percentage distribution according to race by health district is shown in Table 1B. The percentage nonwhite varied from a high of 98.2 in the Druid Health District to a low of 13.4 per cent in the Northwestern Health District.

The family unit size of the persons interviewed at Well Baby Clinics averaged five persons. Two-person families, that is, mother and infant, constituted only 3.5 per cent of all family units interviewed. Families of six or more members made up 34 per cent of all persons included in this study.

Table 2 shows the relationship of persons surveyed to children seen at the Well Baby Clinics. Over 91 per cent of all children in the clinics were brought there by a parent which in almost all cases was the child's mother. Grandparents and other relatives accounted for six per cent of the interviewed persons, and non-related persons - guardians, baby sitters and friends - accounted for less than two per cent.

Income and Dependency Status

The extent of non-response to questions concerning family income is shown in Table 3. In 142, or about 10 per cent of the 1,401 interviews conducted in this survey, family income information was not obtained. Failure to obtain income data occurred in only 80 out of 1,284, or 6.2 per cent, of the interviews with parents. In contrast, the non-response rate was 53 per cent for the 117 interviews of persons other than the child's parents (Table 2).

The distribution of reported weekly income and size of family unit is shown in Table 4. As mentioned previously 142 of the 1,401 persons interviewed did not give the income of family unit. Seventy-two persons, or 5 per cent of all persons interviewed, were Department of Welfare clients. One interview which recorded a one-person family was a reporting error.

Table 5 shows the percentage and cumulative percentage distribution of persons surveyed according to amount of weekly income and family unit size. The overall median income of the families that utilize Health Department Well Baby Clinics was \$64 per week. This varied from \$28 per week for two-person families to \$71 per week for families with eight or more members. On the average, weekly income increased about \$2.60 a week for each additional family member for families of three up to eight or more members. There is a wide discrepancy, \$30 per week or more, between the weekly income of two-person families and larger family units.

Since the results of this survey are to be used in program planning it is necessary to know something about the characteristics of the individual clinics. Table 6 shows the reported median weekly income for each clinic in the survey. The median weekly income reported for all clinics was \$64, with a range from \$53 to \$78 per week. Eight clinics, Numbers 26, 28, 44, 53, 41, 72, 55, and 18, had an income index of \$70 per week or more. All health districts except Druid contributed at least one clinic to this group.

Comparison With Public Assistance Standards

One approach to the evaluation of the economic status of these people is to determine how persons in the Well Baby Clinics population compare financially with the standards used to determine eligibility for other medical care programs. To what extent is this clinic population composed of indigent persons, medically indigent persons, and persons who would not normally be eligible for publicly supported medical services?

A comparison of the Well Baby Clinic population incomes with the eligibility scales used by the Maryland State Outpatient Program for residents of Baltimore City indicates that among family units with three or more members, about eight out of ten exceed the upper financial limit for medical indigency. For two-person families, one-half exceeds the maximum scale for medical indigency. The following table illustrates this:

Size of Family	Maximum Allowable Weekly Income for Medical Indigency	Per Cent of Well Baby Clinic Population Exceeding Maximum Allowable Income
2	\$30	46
3	33	88
4	39	90
5	45	85
6	51	84
7	58	72
8 or more	58	79

It is recognized that different methods of determining income are being compared. When questioned about income in connection with the outpatient program the respondent might give a conservative statement in order to be declared eligible. In the survey of Well Baby Clinics there was no necessity for this since financial eligibility was not being determined. Taking this into account still leaves one with the impression that the majority of the Well Baby Clinic population is economically above the level of medical indigency.

In brief, we find that (1) about five per cent of the Well Baby Clinic population consists of indigent persons; (2) approximately 15 per cent are medically indigent; and, (3) nearly 80 per cent are above the level of medical indigency. The implications of this, in view of the increase in the numbers of infants whose parents utilize clinic services, points out an area in which program reappraisal is needed.

Table 1A

Number of Children Seen at Well Baby Clinics
According to Age and Health District

Survey of Well Baby Clinics - Baltimore City, 1957

Age of Child	Clinics	Eastern	South- eastern	Southern	Western	North- western	Druid
N U M B E R							
Total	1,401	326	168	233	275	67	332
Under 1	527	161	51	76	100	21	118
1	584	126	76	99	113	32	138
2	162	29	21	26	34	9	43
3	53	7	7	16	19	2	11
4	27	1	2	6	10	1	7
5	21	1	4	8	3	2	3
6	4	-	1	2	-	-	1
Unknown	23	1	6	-	5	-	11
P E R C E N T							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 1	37.6	49.4	30.3	32.6	36.4	31.3	35.5
1	41.7	38.6	45.2	42.5	41.1	47.8	41.6
2	11.6	8.9	12.5	11.1	12.4	13.4	13.0
3	3.8	2.2	4.2	6.9	3.6	3.0	3.3
4	1.9	0.3	1.2	2.6	3.6	1.5	2.1
5	1.5	0.3	2.4	3.4	1.1	3.0	0.9
6	0.3	-	0.6	0.9	-	-	0.3
Unknown	1.6	0.3	3.6	-	1.8	-	3.3

Table 1B

Number of Children Seen at Well Baby Clinics
According to Race and Health District

Survey of Well Baby Clinics - Baltimore City, 1957

Race of Child	All Clinics	Eastern	South- eastern	Southern	Western	North- western	Druid
---------------------	----------------	---------	-------------------	----------	---------	-------------------	-------

N U M B E R

Total	1,401	326	168	233	275	67	332
White	446	88	137	99	59	58	5
Nonwhite	951	235	31	134	216	9	326
Unknown	4	3	-	-	-	-	1

P E R C E N T

Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	31.8	27.0	81.5	42.5	21.5	86.6	1.5
Nonwhite	67.9	72.1	18.5	57.5	78.5	13.4	98.2
Unknown	0.3	0.9	-	-	-	-	0.3

Table 2

Informant's Relationship to Child
Survey of Well Baby Clinics - Baltimore City, 1957

All Persons Interviewed

Health District	Relationship to Child									
	Total		Parent		Other Relative		Other		Unknown	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
All Districts	1,401	100.0	1,284	91.6	84	6.0	25	1.8	8	0.6
Eastern	326	100.0	297	91.1	21	6.4	8	2.5	-	-
Southeastern	168	100.0	157	93.4	7	4.2	1	0.6	3	1.8
Southern	233	100.0	216	92.7	13	5.6	4	1.7	-	-
Western	275	100.0	252	91.6	16	5.8	7	2.6	-	-
Northwestern	67	100.0	58	86.6	6	8.9	-	-	3	4.5
Druid	332	100.0	304	91.6	21	6.3	5	1.5	2	0.6
Respondents to Income Questions										
All Districts	1,259	100.0	1,204	95.6	40	3.2	7	0.6	8	0.6
Eastern	279	100.0	272	97.5	6	2.1	1	0.4	-	-
Southeastern	165	100.0	155	93.9	7	4.3	-	-	3	1.8
Southern	209	100.0	200	95.7	3	1.4	1	0.5	-	-
Western	240	100.0	235	97.9	4	1.7	1	0.4	-	-
Northwestern	63	100.0	55	87.3	5	7.9	-	-	3	4.8
Druid	303	100.0	287	94.7	10	3.3	4	1.3	2	0.7
Nonrespondents to Income Questions										
All Districts	142	100.0	80	56.3	44	31.0	18	12.7	-	-
Eastern	47	100.0	25	53.2	15	31.9	7	14.9	-	-
Southeastern	3	100.0	2	66.7	-	-	1	33.3	-	-
Southern	24	100.0	16	66.7	5	20.8	3	12.5	-	-
Western	35	100.0	17	48.6	12	34.3	6	17.1	-	-
Northwestern	4	100.0	3	75.0	1	25.0	-	-	-	-
Druid	29	100.0	17	58.6	11	37.9	1	3.5	-	-

Table 3

Extent of Nonresponse to Income Question
by Health District

Survey of Well Baby Clinics - Baltimore City, 1957

Health District	Total	Number of Nonrespondents	Per Cent of Nonrespondents
All Districts	1,401	142	10.1
Eastern	326	47	14.4
Western	275	35	12.7
Druid	332	29	8.7
Southeastern	168	3	1.8
Southern	233	24	10.3
Northwestern	67	4	6.0

Table 4

Distribution of Interviewed Persons
According to Reported Weekly Income and Size of Family Unit

Survey of Well Baby Clinics - Baltimore City, 1957

Reported Weekly Income (In Dollars)	Total	Size of Family Unit							
		One	Two	Three	Four	Five	Six	Seven	Eight and Over
Total	1,401	1	49	270	332	273	197	135	144
Less than 10	5	-	3	2	-	-	-	-	-
10 - 19	16	-	6	7	1	1	-	1	-
20 - 29	40	-	9	14	8	5	2	1	1
30 - 39	73	-	11	11	20	16	7	6	2
40 - 49	138	-	1	45	34	26	15	9	8
50 - 59	215	-	1	43	58	50	35	14	14
60 - 69	263	-	1	49	74	50	41	21	27
70 - 79	220	-	1	28	59	41	35	20	36
80 - 89	103	-	-	11	19	20	18	20	12
90 - 99	44	-	-	5	10	9	6	8	6
100 -109	30	-	-	5	3	7	7	1	7
110 -119	17	-	-	4	-	6	3	3	1
120 -129	11	-	-	3	4	1	2	1	-
130 -139	5	-	-	-	3	1	1	-	-
140 and Over	7	-	-	2	-	1	1	1	2
Department of Public Welfare	72	-	9	9	12	15	6	12	9
Income Not Stated	142	1	7	29	27	24	18	17	19

Table 5

Per Cent and Cumulative Percentage Distribution of Interviewed Persons
According to Reported Weekly Income and Size of Family Unit

Survey of Well Baby Clinics - Baltimore City, 1957

I N C O M E	A L L F A M I L I E S		T W O		T H R E E		F O U R	
	Per Cent	Cumulative Per Cent	Per Cent	Cumulative Per Cent	Per Cent	Cumulative Per Cent	Per Cent	Cumulative Per Cent
Total	100.0		100.0		100.0		100.0	
Less than 10	0.4	0.4	9.1	9.1	0.9	0.9	-	-
10 - 19	1.4	1.8	18.2	27.3	3.0	3.9	0.3	0.3
20 - 29	3.4	5.2	27.3	54.6	6.0	9.9	2.7	3.0
30 - 39	6.1	11.3	33.4	88.0	4.7	14.6	6.8	9.8
40 - 49	11.6	22.9	3.0	91.0	19.4	34.0	11.6	21.4
50 - 59	18.1	41.0	3.0	94.0	18.6	52.6	19.8	41.2
60 - 69	22.1	63.1	3.0	97.0	21.1	73.7	25.3	66.5
70 - 79	18.5	81.6	3.0	100.0	12.0	85.7	20.1	86.5
80 - 89	8.6	90.2	-	-	6.0	91.7	6.5	93.1
90 - 99	3.7	93.9	-	-	2.1	93.8	3.4	96.5
100 - 109	2.5	96.4	-	-	2.1	95.9	1.0	97.5
110 - 119	1.5	97.9	-	-	1.7	97.6	-	-
120 - 129	0.9	98.8	-	-	1.3	98.9	1.4	98.9
130 - 139	0.5	99.3	-	-	-	-	1.0	99.9
140 and Over	0.6	99.9	-	-	0.9	99.8	-	-
Median Weekly Income \$	64	28	58	62				

Table 5 (Continued)

I N C O M E	F I V E		S I X		S E V E N		E I G H T or M O R E	
	Per Cent	Cumulative Per Cent	Per Cent	Cumulative Per Cent	Per Cent	Cumulative Per Cent	Per Cent	Cumulative Per Cent
Total	100.0		100.0		100.0		100.0	
Less than 10	-		-		-		-	
10 - 19	0.4	0.4	-	1.2	0.9	0.9	-	0.9
20 - 29	2.1	2.5	-	5.3	0.9	1.8	0.9	0.9
30 - 39	6.8	9.3	1.2	14.0	5.7	7.5	1.8	2.7
40 - 49	11.1	20.4	4.1	34.3	8.4	15.9	6.9	9.6
50 - 59	21.4	41.8	8.7	58.0	13.2	29.1	12.1	21.7
60 - 69	21.4	63.2	20.3	78.2	19.8	48.9	23.3	45.0
70 - 79	17.5	80.7	23.7	88.6	18.9	67.8	31.0	76.0
80 - 89	8.6	89.3	20.2	92.1	18.8	86.6	10.3	86.3
90 - 99	3.8	93.1	10.4	96.1	7.5	94.1	5.1	91.4
100 - 109	3.0	96.1	3.5	99.1	0.9	95.0	6.0	97.4
110 - 119	2.6	98.7	4.0	99.9	2.8	97.8	0.9	98.3
120 - 129	0.4	99.1	1.8	99.7	0.9	98.7	-	-
130 - 139	0.4	99.5	1.2	100.3	-	99.6	-	-
140 and Over	0.4	99.9	0.6		0.9		1.7	100.0
Median Weekly Income \$	63		66		70		71	

Table 6

Median Income For Individual Clinics

Survey of Well Baby Clinics - Baltimore City, 1957

Clinic Number	Health District	Median Income
All Clinics	-	\$64
43	Southeastern	53
54	Southern	55
23	Western	56
31	Druid	56
46	Southeastern	56
16	Eastern	57
11	Eastern	57
32	Druid	57
36	Druid	57
58	Southern	57
59	Southern	60
19	Eastern	61
15	Eastern	61
34	Druid	61
56	Southern	63
45	Southeastern	64
74	Northwestern	64
33	Druid	65
35	Druid	65
42	Southeastern	67
14	Eastern	67
57	Southern	67
13	Eastern	68
25	Western	68
27	Western	68
47	Southeastern	69
51	Southern	69
26	Western	70
28	Western	71
44	Southeastern	72
53	Southern	72
41	Southeastern	73
72	Northwestern	74
55	Southern	75
18	Eastern	78

BALTIMORE CITY HEALTH DEPARTMENT
RESEARCH AND PLANNING SECTION

Maryland Room
University of Maryland Library
College Park, Md.

QUARTERLY

STATISTICAL

REPORT

MARRIAGES

BIRTHS

MORTALITY

MORBIDITY

THIRD QUARTER 1959

DECEMBER 7, 1959 VOL. II NO. 3

BALTIMORE CITY HEALTH DEPARTMENT

HUNTINGTON WILLIAMS, M.D.

Commissioner

RESEARCH AND PLANNING SECTION

MATTHEW TAYBACK, Sc.D.

Assistant Commissioner of Health

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation."

Quetelet

Inquiries concerning the materials published, should be addressed to Mr. Todd M. Frazier, Director, Bureau of Biostatistics, Baltimore City Health Department, Baltimore 3, Maryland.

Table of Contents

A	Summary of Vital Events	1 - 2
B	Annual Rates by Month for Births and Selected Causes of Death	3
C	Tables of Vital Events	4 - 6
	I Marriages, Births, Deaths by Race	4
	II Deaths From Selected Causes	5
	III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	6
D	Births, Deaths and Cases by Health District, 1958	7 - 22
	Eastern Health District	7 - 9
	Western Health District	10 - 12
	Druid Health District	13 - 15
	Southeastern Health District	16 - 18
	Southern Health District	19 - 21
	Health District Map, Figure 1	22
E	Population Estimates, Baltimore, Maryland, July 1, 1959	23 - 30



Vital Events - Baltimore, Maryland

January-September, 1959

Marriages and Births

During the first nine months of 1959, 7,296 marriages were recorded in Baltimore, a decrease of 669 from the previous three year average for the same months.

In the months January-September there were 17,863 resident births, of which 9,382, or 52.5 per cent, were white and 8,481, or 47.5 per cent, were Negro. The combination of a high birth rate, 36 per 1000 population, and an increasing Negro population, make it likely that by the end of next year the number of Negro resident births will exceed the number of white births.

Mortality

The death rate from all causes, 11.4 deaths per 1000 population, was at the same level as the average for comparable months during the preceding three years. The January-September tuberculosis death rate of 14.4 deaths per 100,000 population represents a decrease of 29 per cent from the 1956-1958 average rate of 20.2.

Infant and Maternal Mortality

Infant mortality rates, principally the Negro rate, showed an increase in the first three quarters of 1959. For the base line period, 1956-1958, the total infant mortality rate was 32.6 compared to the current rate of 34.5. For the past three years we have been confronted with the problem of a high neonatal mortality rate. There is no evidence that this rate is decreasing. In addition, there is now evidence that the death rate is increasing in the post neonatal period, that is, among infants 28 days of age up to 1 year of age. Thus, in the first three quarters of 1959 the post neonatal death rate was 9.1 per 1000 live births compared to 7.7 for the three year base line period. This increase of about 18 per cent will bear watching throughout the remainder of the year.

Morbidity

The 190 newly reported tuberculosis cases falls below the base period average of 260 by almost 27 per cent. To date this year there have been 678 cases of this disease reported, a decrease of 126 from the average number of cases reported in the comparable quarters of the base line period.

The number of syphilis cases continued to increase, 430 this quarter compared to the three year average of 326. This trend has been observed throughout the year and can be attributed to improved reporting procedures.

The first three typhoid fever cases this year occurred in the third quarter. No increase was seen in whooping cough, meningococcal infections or measles. The nine cases of acute poliomyelitis that occurred during July, August, and September represent a slight increase over the experience for the last three years.

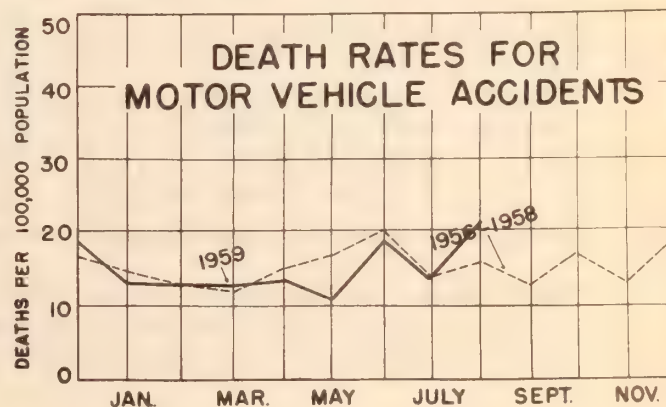
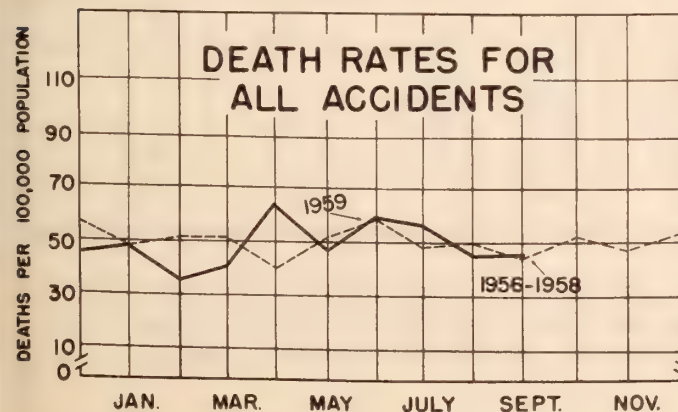
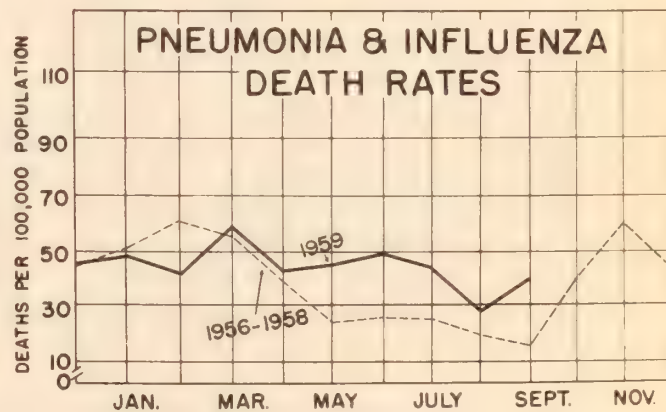
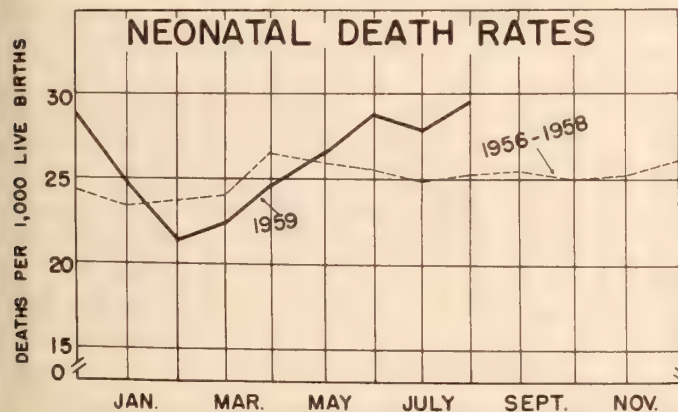
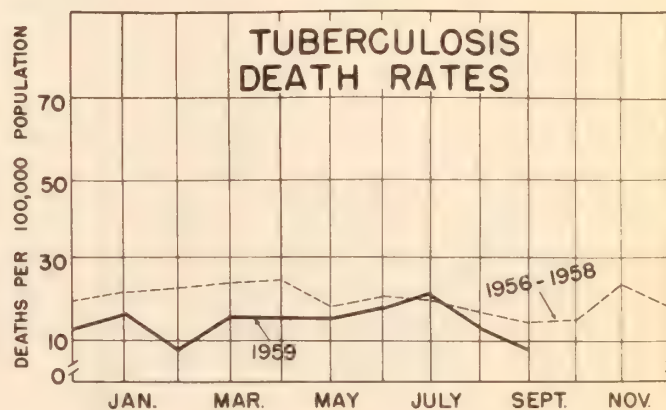
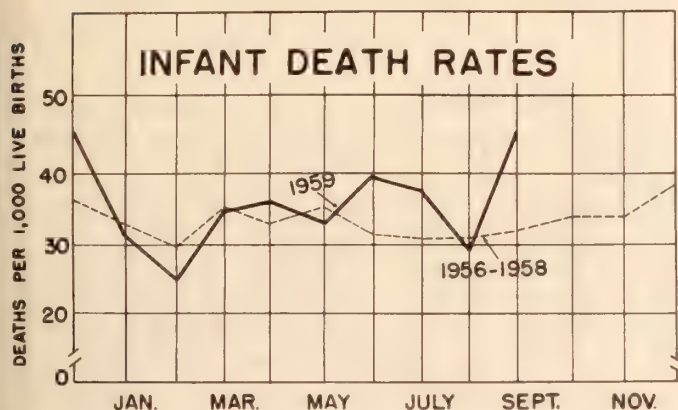
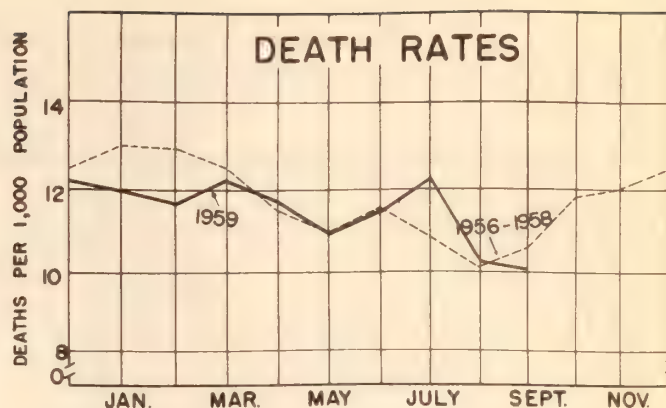
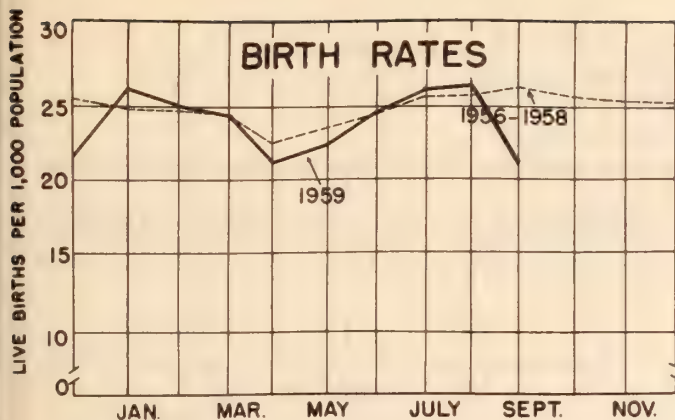


Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Third Quarter, 1959 and 1956-58

Vital Event	JULY - SEPTEMBER				JANUARY-SEPTEMBER	
	Number		Rate*		Rate*	
	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58
	All Races					
Marriages Recorded.....	2,588	2,918	10.4	11.9	9.9	10.9
Births.....	6,202	6,556	24.9	26.7	24.2	24.8
Deaths, all causes.....	2,714	2,574	10.9	10.5	11.4	11.5
Deaths, under one year.....	229	207	36.9	31.6	34.5	32.6
under 28 days.....	173	165	27.9	25.2	25.4	24.9
28 days-11 months...	56	42	9.0	6.4	9.1	7.7
White						
Marriages Recorded.....	1,622	1,910	9.5	11.0	9.2	10.3
Births.....	3,255	3,694	19.2	21.3	18.6	20.0
Deaths, all causes.....	1,886	1,849	11.1	10.7	11.8	11.8
Deaths, under one year.....	86	87	26.4	23.5	25.4	25.2
under 28 days.....	64	71	19.7	19.2	18.7	19.5
28 days-11 months...	22	16	6.7	4.3	6.7	5.7
Nonwhite						
Marriages Recorded.....	966	1,008	12.2	14.0	11.3	12.4
Births.....	2,947	2,862	37.4	39.7	36.2	36.3
Deaths, all causes.....	828	725	10.5	10.1	10.5	10.9
Deaths, under one year.....	143	120	48.5	41.9	44.7	42.4
under 28 days.....	109	94	37.0	32.8	32.8	32.1
28 days-11 months...	34	26	11.5	9.1	11.9	10.3

*Infant mortality rates are per 1000 live births. All other rates --- marriage, birth and death --- are on an annual basis per 1000 population estimated as of July 1, 1959 --- total population 987,000; white, 674,000; nonwhite, 313,000.

Table II

Resident Deaths From Selected Causes
Third Quarter, 1959 and 1956-58

Cause of Death	JULY - SEPTEMBER				JANUARY-SEPTEMBER	
	Number		Rate Per 100,000*		Rate Per 100,000*	
	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58
All Causes	2,714	2,574	10.9	10.5	11.4	11.5
Tuberculosis (001-019).....	36	41	14.5	16.7	14.4	20.2
Syphilis (020-029).....	8	14	3.2	5.7	3.8	5.4
Cancer (140-205).....	467	440	187.7	179.3	188.7	186.2
Diabetes mellitus (260).....	52	54	20.9	22.0	23.3	25.5
Vascular lesions of the central nervous system (330-334).....	200	202	80.4	82.3	88.6	88.7
Diseases of the heart (410-443)....	1,098	1,048	441.4	427.1	478.0	485.2
Influenza and pneumonia (480-483, 490-493).....	95	50	38.2	20.4	44.3	35.3
Nephritis and nephrosis (590-594)..	22	25	8.8	10.2	9.8	10.2
Puerperal causes (640-652, 670-689).....	1	3	0.4	1.2	0.7	1.4
Congenital malformations (750-759).	37	36	14.9	14.7	11.2	13.7
Certain diseases of early infancy (760-776).....	151	143	60.7	58.3	54.6	53.8
Suicides (963, 970-979).....	20	27	8.0	11.0	8.8	10.7
Homicides (964, 980-999).....	29	25	11.7	10.2	8.0	9.6
Accidents (800-802, 810-835, 840-962).....	124	118	49.8	48.1	49.4	50.1
Motor vehicle (810-835).....	47	34	18.9	13.9	15.4	15.2

*Rates shown for all causes are per 1000 population.

TABLE III
 CASES AND DEATHS FROM SELECTED CAUSES, AND INFANT DEATHS BY HEALTH DISTRICTS
 THIRD QUARTER 1959, AND 1956-1958 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Southeastern		Southern		Western		Druid		Northwestern	
	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58
Infant deaths	229	206	67	58	19	22	18	26	26	30	65	45	33	25
Tuberculosis all forms	190 36	260 41	56 8	70 11	21 8	39 8	16 2	20 5	21 4	40 8	45 8	65 6	29 4	25 3
Syphilis	430 8	326 14	122 1	73 3	31 2	20 2	18 0	15 1	45 1	36 1	160 3	155 5	46 1	24 1
Typhoid fever	3 0	13 0	1 0	0 0	0 0	0.3 0	1 0	0 0	1 0	0.7 0	0 0	0.3 0	0 0	0 0
Diphtheria	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Whooping Cough	56 0	53 0.3	16 0	24 0	9 0	5 0	2 0	3 0	7 0	7 0	13 0	12 0.3	9 0	2 0
Meningococcal infections	2 1	3 0.6	1 1	1 0	0 0	0.3 0	0 0	0.3 0	1 0	0.3 0.3	0 0	1 0.3	0 0	0 0
Measles	163 0	148 0	24 0	36 0	19 0	11 0	24 0	15 0	7 0	15 0	40 0	40 0	49 0	32 0
Acute polio- myelitis (paralytic)	9 0	7 0.6	1 0	2 0.3	0 0	1 0	2 0	1 0	2 0	1 0.3	2 0	2 0	2 0	0 0

All figures corrected for residence within Maryland.

*Totals include some intranfers allocated to Baltimore City but not otherwise allocated to Health Districts.

Resident Births, Deaths, and Communicable Diseases

The following tables which formerly appeared in the Annual Report of the Baltimore City Health Department have now been transferred to the Quarterly Statistical Report. In addition to these tabulations a map showing selected statistics for each Health District is included.

Table 1

Resident Births Eastern Health District, 1958

Place of Delivery and Attendant	Total	White	Nonwhite
All Births	8,964	5,249	3,715
Hospital	8,816	5,216	3,600
Home	148	33	115
Private Physician	93	25	68
Midwife	33	4	29
Other	22	4	18

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color Eastern Health District, 1958

Cause of Death	Total	White	Nonwhite
All Causes	4,135	3,185	950
Tuberculosis, all forms (001-019).....	57	32	25
Respiratory tuberculosis (001-008).....	53	31	22
Syphilis (020-029).....	11	5	6
Other infective diseases of the intestinal tract (041, 044, 049).....	1	1	-
Scarlet fever and streptococcal sore throat (050-051).....	1	1	-
Meningococcal infections (057).....	2	-	2
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074)	9	5	4

Table 2 (Continued)
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Eastern Health District, 1958

Cause of Death	Total	White	Nonwhite
Measles (085).....	2	1	1
Other virus diseases (086-096).....	2	-	2
Other infective and parasitic diseases (110-138).....	5	3	2
Malignant neoplasms (140-205).....	659	530	129
Lymphatic and hematopoietic (200-205).....	54	44	10
Benign and unspecified neoplasms (210-239).....	21	16	5
Diabetes (260).....	79	59	20
Anemias (290-293).....	7	6	1
Other diseases of the blood and blood- forming organs (294-299).....	6	5	1
Vascular lesions of the central nervous system (330-334).....	346	263	83
Rheumatic fever (400-402)	3	3	-
Diseases of the heart (410-443).....	1,762	1,501	261
Chronic rheumatic heart disease (410-416)....	46	38	8
Arteriosclerotic and degenerative heart disease (420-422).....	1,319	1,181	138
Other diseases of the heart (430-434).....	47	38	9
Hypertensive heart disease (440-443).....	350	244	106
Other hypertensive diseases (444-447).....	27	15	12
Arteriosclerosis (450).....	51	48	3
Other diseases of the circulatory system (451-468).....	62	45	17
Nephritis and nephrosis (590-594).....	42	25	17
Influenza and pneumonia (480-483, 490-493).....	154	113	41
Pneumonia (490-493).....	149	110	39
Bronchitis (500-502).....	9	7	2
Ulcer of the stomach and duodenum (540-541)....	22	16	6
Intestinal obstruction and hernia (560-570)....	25	19	6
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	14	13	1
Cirrhosis of the liver (581).....	56	49	7
Hyperplasia of prostate (610).....	6	6	-
Puerperal causes (640-689).....	7	2	5
Congenital malformations (750-759).....	39	24	15
Certain diseases of early infancy (760-776)....	191	65	126
Pneumonia of newborn (763).....	15	8	7
Senility, ill-defined and unknown conditions (780-795).....	16	12	4
All other diseases	212	135	77
Accidents, total (800-962, 965).....	153	112	41
Motor vehicle accidents (810-835).....	41	30	11
All other accidents	112	82	30
Suicides (963, 970-979).....	40	37	3
Homicides (964, 980-985).....	36	11	25

Table 3

Communicable Diseases Reported
Eastern Health District, 1958

Disease	Total	White	Nonwhite
Total	5,357	2,127	3,230
Chickenpox	430	262	168
Diphtheria	-	-	-
German measles	481	401	80
Gonococcal infections	2,108	147	1,961
Measles	1,403	931	472
Meningococcal infections	6	3	3
Mumps	76	53	23
Poliomyelitis, paralytic cases	5	2	3
Scarlet fever	87	65	22
Syphilis	296	48	248
Tuberculosis, all forms	294	139	155
Whooping Cough	16	8	8
All others	155	68	87

Table 1
Resident Births
Western Health District, 1958

Place of Delivery and Attendant	Total	White	Nonwhite
All Births	3,116	1,841	1,275
Hospital	3,053	1,809	1,244
Home	63	32	31
Private Physician	49	25	24
Midwife	9	4	5
Other	5	3	2

Table 2
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Western Health District, 1958

Cause of Death	Total	White	Nonwhite
All Causes	1,499	1,142	357
Tuberculosis, all forms (001-019)	34	16	18
Respiratory tuberculosis (001-008).....	31	16	15
Syphilis (020-029).....	2	2	-
Meningococcal infections (057).....	1	1	-
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	1	1	-
Measles (085).....	1	1	-
Other virus diseases (086-096).....	2	2	-
Other infective and parasitic diseases (110-138).....	1	-	1
Malignant neoplasms (140-205).....	235	182	53
Lymphatic and hematopoietic (200-205).....	13	12	1
Benign and unspecified neoplasms (210-239).....	3	2	1
Diabetes (260).....	23	22	1
Anemias (290-293).....	6	4	2
Other diseases of the blood and blood-forming organs (294-299).....	4	4	-
Vascular lesions of the central nervous system (330-334).....	110	75	35

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Western Health District, 1958

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	668	542	126
Chronic rheumatic heart disease(410-416)..	12	8	4
Arteriosclerotic and degenerative heart disease (420-422).....	505	434	71
Other diseases of the heart (430-434).....	19	12	7
Hypertensive heart disease (440-443).....	132	88	44
Other hypertensive diseases (444-447).....	6	5	1
Arteriosclerosis (450).....	21	19	2
Other diseases of the circulatory system (451-468).....	16	13	3
Nephritis and nephrosis (590-594).....	9	6	3
Influenza and pneumonia (480-483, 490-493)..	42	28	14
Pneumonia (490-493).....	41	27	14
Bronchitis (500-502).....	4	4	-
Ulcer of the stomach and duodenum (540-541).	13	8	5
Appendicitis (550-553).....	1	1	-
Intestinal obstruction and hernia (560-570).	12	11	1
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	5	3	2
Cirrhosis of the liver (581).....	25	23	2
Hyperplasia of prostate (610).....	1	-	1
Puerperal causes (640-689).....	2	-	2
Congenital malformations (750-759).....	22	15	7
Certain diseases of early infancy (760-776).	71	34	37
Pneumonia of newborn (763).....	12	7	5
Senility, ill-defined and unknown conditions (780-795).....	4	3	1
All other diseases	74	57	17
Accidents, total (800-962, 965).....	58	41	17
Motor vehicle accidents (810-835)	20	16	4
All other accidents	38	25	13
Suicides (963, 970-979).....	14	14	-
Homicides (964, 980-985).....	8	3	5

Table 3
Communicable Diseases Reported
Western Health District, 1958

Disease	Total	White	Nonwhite
Total	1,435	396	1,039
Chickenpox	84	28	56
Diphtheria	-	-	-
German measles	77	52	25
Gonococcal infections	631	62	569
Measles	272	118	154
Meningococcal infections	1	1	-
Mumps	18	5	13
Poliomyelitis, paralytic cases	1	1	-
Scarlet fever	26	17	9
Syphilis	141	23	118
Tuberculosis, all forms	122	58	64
Typhoid fever	-	-	-
Whooping cough	6	6	-
All others	56	25	31

Table 1

Resident Births
Druid Health District, 1958

Place of Delivery and Attendant	Total	White	Nonwhite
All Births	4,065	274	3,791
Hospital	3,875	261	3,614
Home	190	13	177
Private Physician	136	10	126
Midwife	35	1	34
Other	19	2	17

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Druid Health District, 1958

Cause of Death	Total	White	Nonwhite
All Causes	1,706	182	1,524
Tuberculosis, all forms (001-019).....	39	2	37
Respiratory tuberculosis (001-008).....	37	2	35
Syphilis (020-029).....	20	-	20
Dysentery (045-048).....	1	1	-
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	2	-	2
Other virus diseases (086-096).....	1	-	1
Typhus and rickettsial diseases (100-108)...	-	-	-
Malignant neoplasms (140-205).....	223	29	194
Lymphatic and hematopoietic (200-205).....	11	1	10
Benign and unspecified neoplasms (210-239)...	4	1	3
Diabetes (260).....	25	2	23
Anemias (290-293).....	5	-	5
Other diseases of the blood and blood-forming organs (294-299).....	1	1	-
Vascular lesions of the central nervous system (330-334).....	136	16	120
Rheumatic fever (400-402).....	1	-	1

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Druid Health District, 1958

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	626	66	560
Chronic rheumatic heart disease (410-416).....	14	1	13
Arteriosclerotic and degenerative heart disease (420-422).....	363	55	308
Other diseases of the heart (430-434).....	17	1	16
Hypertensive heart disease (440-443).....	232	9	223
Other hypertensive diseases (444-447).....	14	2	12
Arteriosclerosis (450).....	21	1	20
Other diseases of the circulatory system (451-468).....	21	1	20
Nephritis and nephrosis (590-594).....	28	1	27
Influenza and pneumonia (480-483, 490-493).. Pneumonia (490-493).....	82 82	13 13	69 69
Bronchitis (500-502).....	3	-	3
Ulcer of the stomach and duodenum (540-541).....	4	2	2
Intestinal obstruction and hernia (560-570).....	15	-	15
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	7	2	5
Cirrhosis of the liver (581).....	29	6	23
Hyperplasia of prostate (610).....	4	-	4
Puerperal causes (640-689).....	4	-	4
Congenital malformations (750-759).....	15	-	15
Certain diseases of early infancy (760-776).. Pneumonia of newborn (763)..... Diarrhea of newborn (764).....	133 5 1	8 - -	125 5 1
Senility, ill-defined and unknown conditions (780-795).....	12	3	9
All other diseases	101	15	86
Accidents, total (800-962, 965).....	81	8	73
Motor vehicle accidents (810-835).....	23	2	21
All other accidents	58	6	52
Suicides (963, 970-979).....	9	1	8
Homicides (964, 980-985).....	39	1	38

Table 3
Communicable Diseases Reported
Druid Health District, 1958

Disease	Total	White	Nonwhite
Total	5,186	130	5,056
Chickenpox	181	9	172
Diphtheria	-	-	-
German measles	180	12	168
Gonococcal infections	3,070	38	3,032
Measles	838	34	804
Meningococcal infections	1	-	1
Mumps	32	-	32
Poliomyelitis, paralytic cases ...	-	-	-
Scarlet fever	29	2	27
Syphilis	528	10	518
Tuberculosis, all forms	231	19	212
Typhoid fever	2	1	1
Whooping cough	1	-	1
All others	93	5	88

Table 1

Resident Births
Southeastern Health District, 1958

Place of Delivery and Attendant	Total	White	Nonwhite
All Births	2,105	1,953	152
Hospital	2,078	1,931	147
Home	27	22	5
Private Physician	16	14	2
Midwife	6	6	-
Other	5	2	3

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southeastern Health District, 1958

Cause of Death	Total	White	Nonwhite
All Causes	1,057	984	73
Tuberculosis, all forms (001-019).....	21	16	5
Respiratory tuberculosis (001-008).....	21	16	5
Syphilis (020-029).....	5	1	4
Diphtheria (055).....	1	1	-
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	1	-	1
Other infective and parasitic diseases (110-138).....	2	1	1
Malignant neoplasms (140-205).....	193	181	12
Lymphatic and hematopoietic (200-205).....	13	13	-
Benign and unspecified neoplasms (210-239)...	5	5	-
Diabetes (260).....	32	29	3
Other diseases of the blood and blood-forming organs (294-299).....	3	3	-
Vascular lesions of the central nervous system (330-334).....	71	65	6
Rheumatic fever (400-402).....	1	1	-

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southeastern Health District, 1958

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	410	389	21
Chronic rheumatic heart disease (410-416).....	7	7	-
Arteriosclerotic and degenerative heart disease (420-422).....	320	305	15
Other diseases of the heart (430-434).....	10	10	-
Hypertensive heart disease (440-443).....	73	67	6
Other hypertensive diseases (444-447).....	3	3	-
Arteriosclerosis (450).....	16	12	4
Other diseases of the circulatory system (451-468).....	12	11	1
Nephritis and nephrosis (590-594).....	6	6	-
Influenza and pneumonia (480-483, 490-493).. Pneumonia (490-493).....	34 32	32 30	2 2
Bronchitis (500-502).....	4	3	1
Ulcer of the stomach and duodenum (540-541).....	4	4	-
Intestinal obstruction and hernia (560-570).....	3	3	-
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	5	5	-
Cirrhosis of the liver (581).....	33	33	-
Hyperplasia of prostate (610).....	2	2	-
Congenital malformations (750-759).....	10	10	-
Certain diseases of early infancy (760-776).....	47	46	1
Pneumonia of newborn (763).....	3	3	-
Senility, ill-defined and unknown conditions (780-795).....	6	5	1
All other diseases	65	58	7
Accidents, total (800-962, 965).....	47	45	2
Motor vehicle accidents (810-835).....	18	18	-
All other accidents.....	29	27	2
Suicides (963, 970-979).....	11	11	-
Homicides (964, 980-985).....	4	3	1

Table 3

Communicable Diseases Reported
Southeastern Health District, 1958

Disease	Total	White	Nonwhite
Total	872	702	170
Chickenpox	71	70	1
Diphtheria	1	1	-
German measles	42	39	3
Gonococcal infections	137	53	84
Measles	356	314	42
Meningococcal infections	2	2	-
Mumps	69	63	6
Poliomyelitis, paralytic cases ...	1	1	-
Scarlet fever	17	16	1
Syphilis	43	30	13
Tuberculosis, all forms	84	69	15
Typhoid fever	-	-	-
Whooping cough	2	2	-
All others	47	42	5

Table 1

Resident Births
Southern Health District, 1958

Place of Delivery and Attendant	Total	White	Nonwhite
All Births	2,487	1,615	872
Hospital	2,404	1,574	830
Home	83	41	42
Private Physician	66	32	34
Midwife	9	5	4
Other	8	4	4

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southern Health District, 1958

Cause of Death	Total	White	Nonwhite
All Causes	829	662	167
Tuberculosis, all forms (001-019).....	18	11	7
Respiratory tuberculosis (001-008).....	18	11	7
Syphilis (020-029).....	1	-	1
Other infective diseases of the intestinal tract (041, 044, 049)	1	-	1
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	2	1	1
Encephalitis (082-083).....	2	2	-
Other infective and parasitic diseases (110-138).....	1	1	-
Malignant neoplasms (140-205).....	131	110	21
Lymphatic and hematopoietic (200-205).....	5	4	1
Benign and unspecified neoplasms (210-239).....	3	1	2
Diabetes (260).....	12	11	1
Other diseases of the blood and blood-forming organs (294-299).....	1	1	-
Vascular lesions of the central nervous system (330-334).....	44	36	8
Rheumatic fever (400-402).....	1	1	-

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southern Health District, 1958

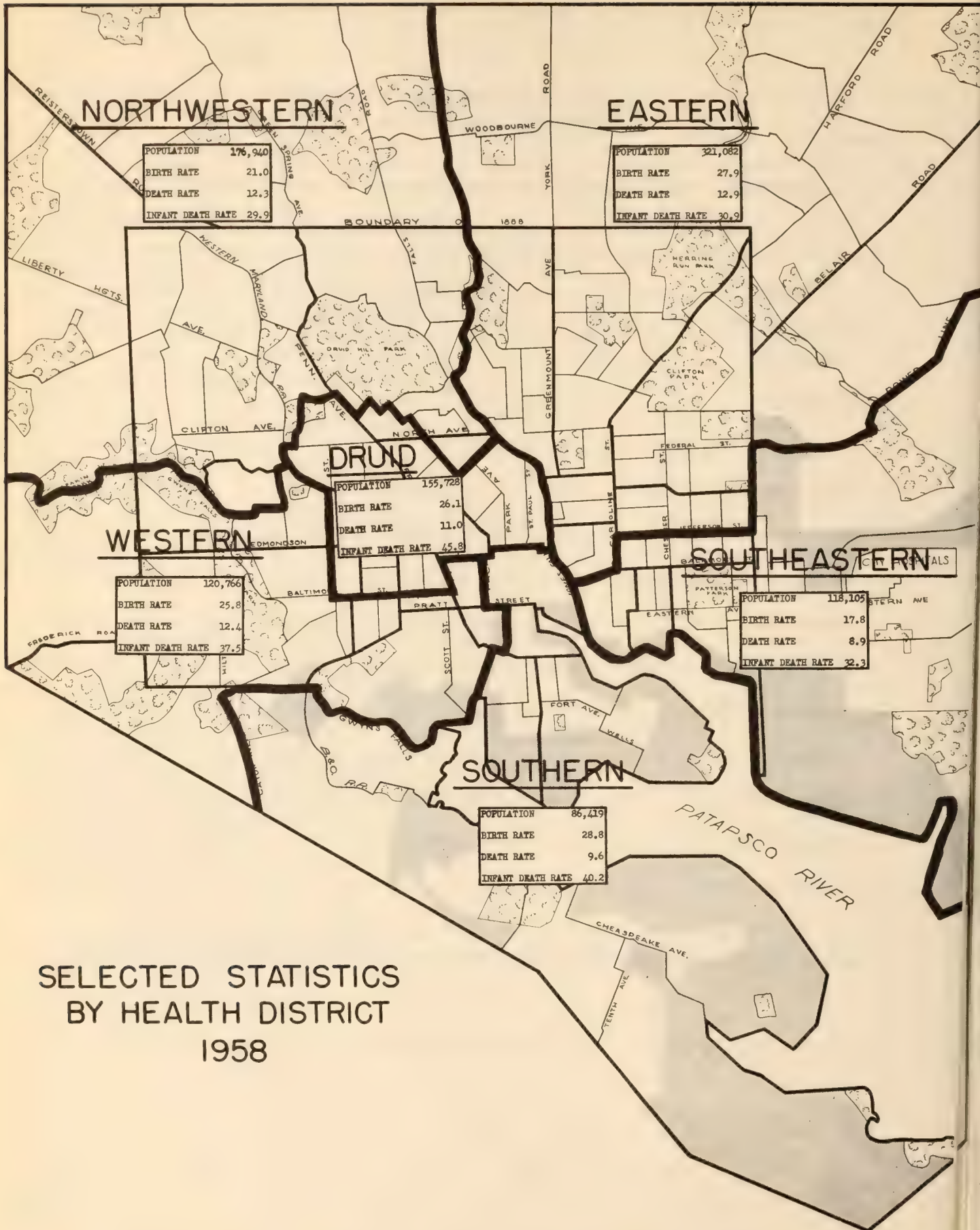
Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	320	278	42
Chronic rheumatic heart disease (410-416).....	6	6	-
Arteriosclerotic and degenerative heart disease (420-422).....	245	219	26
Other diseases of the heart (430-434).....	11	7	4
Hypertensive heart disease (440-443).....	58	46	12
Other hypertensive diseases (444-447).....	1	-	1
Arteriosclerosis (450).....	11	8	3
Other diseases of the circulatory system (451-468).....	11	9	2
Nephritis and nephrosis (590-594).....	9	5	4
Influenza and pneumonia (480-483, 490-493).. Pneumonia (490-493).....	30 29	22 21	8 8
Bronchitis (500-502).....	4	4	-
Ulcer of the stomach and duodenum (540-541).....	6	6	-
Intestinal obstruction and hernia (560-570).....	6	5	1
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	4	2	2
Cirrhosis of the liver (581).....	17	15	2
Hyperplasia of prostate (610).....	2	2	-
Puerperal causes (640-689).....	1	-	1
Congenital malformations (750-759).....	7	5	2
Certain diseases of early infancy (760-776).. Pneumonia of newborn (763).....	83 5	55 4	28 1
Senility, ill-defined and unknown conditions (780-795).....	4	3	1
All other diseases	41	28	13
Accidents, total (800-962, 965).....	40	32	8
Motor vehicle accidents (810-835).....	9	7	2
All other accidents	31	25	6
Suicides (963, 970-979).....	7	4	3
Homicides (964, 980-985).....	8	4	4

Table 3

Communicable Diseases Reported
Southern Health District, 1958

Disease	Total	White	Nonwhite
Total	811	352	459
Chickenpox.....	90	59	31
Diphtheria.....	-	-	-
German measles	31	17	14
Gonococcal infections	266	38	228
Measles	199	126	73
Meningococcal infections	2	1	1
Mumps	8	3	5
Poliomyelitis, paralytic cases	3	2	1
Scarlet fever	11	3	8
Syphilis	65	14	51
Tuberculosis, all forms	73	47	26
Typhoid fever	-	-	-
Whooping cough	4	3	1
All others	59	39	20

FIGURE 1



SELECTED STATISTICS
BY HEALTH DISTRICT
1958

Population Estimates - Baltimore, Maryland

July 1, 1959

This report is the last of a series concerned with population estimates for Baltimore City during the period 1950-1959. The 1960 decennial census which will be taken in April of next year will provide us with a new bench mark from which future estimates will be made and past estimates corrected where necessary. In this last report, consumers of this information should bear in mind that these figures are subject to the cumulative effect of estimation errors made during the past nine years.

Race and Age Composition

The method used to estimate age and racial components of the city's population is a modification of the Bureau of Census Method II ^{1/} ^{2/}. In the 12 month period ending July 1, 1959 the city's estimated population increased 4,717 persons, from 982,096 to 986,813. The white population decreased from 681,142 to 673,994, a loss of 7,148 persons. At the same time the nonwhite population increased from 300,954 to 312,819, a gain of 11,865. The components of population change; births, deaths, and migration estimates, are shown in the following table:

Components of 1959 Population Change

<u>Component</u>	<u>Total</u>	<u>White</u>	<u>Nonwhite</u>
Population - July 1958	982,096	681,142	300,954
Births, July 1, 1958-June 30, 1959	+ 24,108	12,863	11,245
Deaths, July 1, 1958-June 30, 1959	- 11,111	7,819	3,292
Net Migration	- 8,280	- 12,192	+ 3,912
Population - July 1, 1959	986,813	673,994	312,819

1/ Current Population Reports, Series P-25, Number 133, March 16, 1956. U. S. Bureau of Census.

2/ Current Population Reports, Series P-25, Number 165, February 4, 1957. U. S. Bureau of Census.

The natural increase in the white population (the excess of births over deaths) was offset by the migration of white persons from the city. Among Negroes the natural increase of 7,953 was augmented by an estimated immigration of 3,912 persons.

The 1959 population by age and race is shown in Table 1. A comparison of the percentage distribution of the city's population according to age and race is shown in Table 2 for the years 1950 and 1959. This table shows that the proportion of white children under 5 years, and 5 through 14 years, increased during the period 1950-1959. There was also an increase in the percentage of the white population in the groups 45-64 and 65 years and over. Thus, in today's white population 1 in every 10 residents of the city is 65 or over. The loss in the white population has occurred in the age groups, 15-24, and 25-44. In 1950 these age groups accounted for 46.4 per cent of the total white population whereas they now constitute only 39.5 per cent.

The city's Negro population has shown a large increase, especially in the part of this population under age 15. In 1950, 27.9 per cent of all Negro residents were under age 15. Now, 37.4 per cent, or 117,095 young people, are in this age group.

Population by Census Tract

The 1959 estimates of population by census tract are shown in Table 3. . A census tract map of the city is shown in Figure 2. The estimated 1959 population increased 5 to 19 per cent over the 1957 estimates in only eight of the city's 168 census tracts. These tracts are 4-2, 15-7B, 25-1A, 25-2B, 25-3A, 26-1, 26-2, and 27-20. From 1957 to 1959 a decrease of 5 per cent or more was noted in five census tracts, 3-1, 4-1, 5-2, 6-5, and 12-7.

Summary

This is the last report in the current intercensal series. In April 1960 the Federal Government will conduct a census that will give us an accurate count of the city's population and characteristics of Baltimore residents. In a review of

the changes since 1950, the last census, we see that the total population has increased by only 37,000 persons; the white population has decreased from 723,000 to 674,000, and the Negro population has increased from 227,000 to 313,000.

Since 1950 the number of children age 15 or under has increased by more than 61,000 persons. Now, nearly 3 out of every 10 residents are in the pre-school or junior high school age groups. The number of senior citizens, that is persons 65 years and over, has increased by nearly 13,000 persons in the last nine years. During these years a large part of the city's population moved from inner city areas to the periphery of the city. Thus, although the city has grown slowly in the past decade there are many characteristics of the population that have changed markedly.

Table 1

Estimated Population by Age and Race
Baltimore, Maryland - July 1, 1959

Age	Total	White	Nonwhite
All Ages	986,813	673,994	312,819
Under 5	114,177	63,997	50,180
5 - 9	95,015	55,497	39,518
10 - 14	77,506	50,109	27,397
15 - 19	65,901	44,036	21,865
20 - 24	53,748	35,063	18,685
25 - 29	52,818	34,387	18,431
30 - 34	70,558	47,981	22,577
35 - 39	79,875	54,741	25,134
40 - 44	70,857	50,071	20,786
45 - 49	69,478	49,238	20,240
50 - 54	59,084	44,644	14,440
55 - 59	53,745	40,789	12,956
60 - 64	41,321	33,689	7,632
65 - 69	33,030	27,976	5,054
70 - 74	23,214	19,777	3,437
75 - 79	14,612	12,313	2,299
80 - 84	7,480	6,339	1,141
85 and Over	4,394	3,347	1,047

Table 2

Percentage Distribution of Population by Age and Race
Baltimore, Maryland - 1950 and 1959

Age	Total		White		Nonwhite	
	1950	1959	1950	1959	1950	1959
All Ages	100.0	100.0	100.0	100.0	100.0	100.0
Under 5	9.7	11.6	9.1	9.5	11.6	16.0
5 - 14	14.0	17.5	13.3	15.6	16.3	21.4
15 - 24	14.3	12.1	13.9	11.7	15.3	13.0
25 - 44	33.1	27.8	32.5	27.8	35.2	27.8
45 - 64	21.5	22.7	22.8	25.0	17.4	17.7
65 and Over	7.4	8.3	8.4	10.4	4.2	4.1

Table 3

Estimated Population by Census Tract
Baltimore, Maryland - July 1, 1959

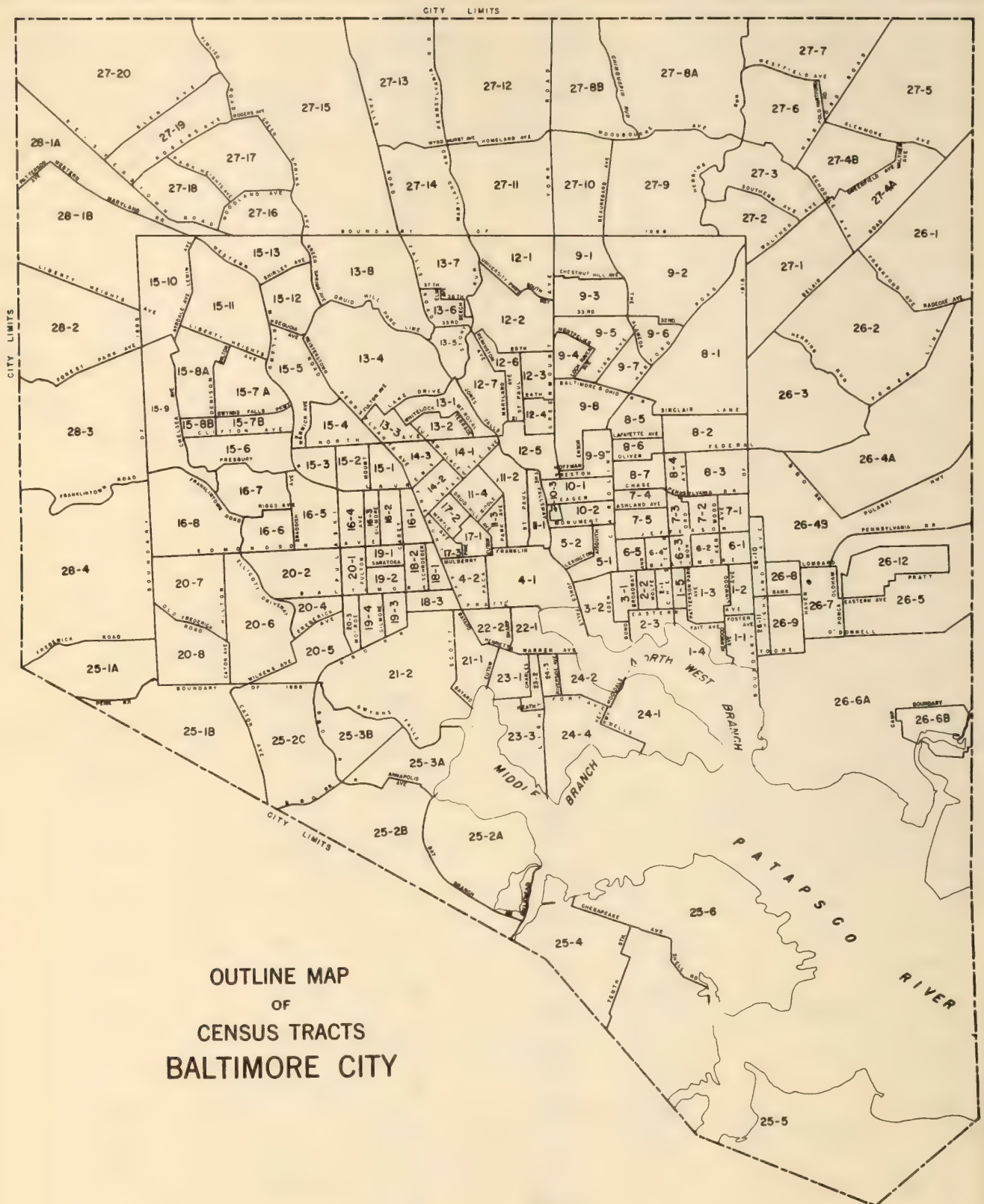
Total - 986,813

Census Tract	Population	Census Tract	Population	Census Tract	Population	Census Tract	Population
1-1	5,891	7-4	8,070	11-3	3,040	15-4	6,344
2	5,359	5	5,730	4	7,874	5	2,283
3	4,023					6	7,281
4	2,896	8-1	6,792	12-1	4,363	7A	2,986
5	3,989	2	5,746	2	8,599	7B	3,764
		3	9,986	3	5,972	8A	4,804
2-1	4,091	4	4,030	4	5,944	8B	1,359
2	4,127	5	5,752	5	6,468	9	4,912
3	3,914	6	5,970	6	4,026	10	6,826
		7	8,073	7	5,225	11	8,407
3-1	5,313					12	6,265
2	4,396	9-1	5,714	13-1	4,702	13	6,693
		2	3,958	2	5,374		
4-1	1,662	3	5,331	3	6,210	16-1	6,881
2	6,637	4	2,319	4	3,819	2	9,005
5-1	6,209	5	2,897	5	1,848	3	5,850
2	2,205	6	5,157	6	4,596	4	6,797
		7	4,536	7	6,320	5	4,997
6-1	4,408	8	7,245	8	7,088	6	5,670
2	5,369	9	7,763			7	7,645
3	4,208			14-1	7,761	8	8,298
4	5,570	10-1	9,581	2	9,743		
5	3,237	2	7,971	3	8,961	17-1	6,272
		3	2,970			2	7,551
7-1	3,830			15-1	9,731	3	6,172
2	5,701	11-1	2,752	2	7,398		
3	3,468	2	6,392	3	4,443		

Table 3 (Continued)

Census Tract	Population	Census Tract	Population	Census Tract	Population	Census Tract	Population
18-1	6,807	24-1	4,060	26-9	4,211	27-19	4,631
2	6,988	2	3,156	10	4,390	20	11,819
3	5,717	3	4,062	11	3,326	28-1A	3,509
19-1	6,738	4	4,100	12	1,745		
		25-1A	4,906	27-1	9,180	1B	7,129
2	6,893					2	5,894
3	4,996	1B	4,572	2	3,506	3	3,388
4	5,952	2A	12,048	3	4,962	4	12,749
20-1	6,921	2B	2,797	4A	5,912		
		2C	3,452	4B	4,382		
2	7,790	3A	5,187	5	10,565		
3	4,236	3B	3,801	6	6,847		
4	4,284	4	13,184	7	5,509		
5	5,357	5	10,495	8A	14,067		
6	4,885	6	3,828	8B	8,884		
7	8,507	26-1	8,693	9	11,676		
8	2,938			10	9,524		
21-1	7,335	2	8,823	11	3,479		
		3	15,035	12	6,740		
2	7,353	4A	6,702	13	3,141		
22-1	3,986	4B	2,783	14	4,981		
2	5,379	5	7,628	15	5,974		
23-1	5,678	6A	11,761	16	6,226		
		6B	868	17	6,627		
		7	3,073	18	10,924		
		8	3,374				

FIGURE 2







BALTIMORE CITY HEALTH DEPARTMENT
RESEARCH AND PLANNING SECTION

Maryland Room
University of Maryland Library
College Park, Md.

Maryland Room
University of Maryland Library
College Park, Md.

QUARTERLY

STATISTICAL

REPORT

MARRIAGES

BIRTHS

MORTALITY

MORBIDITY

FOURTH QUARTER 1959

FEBRUARY 23, 1960 VOL. II NO. 4

BALTIMORE CITY HEALTH DEPARTMENT

HUNTINGTON WILLIAMS, M.D.
Commissioner

RESEARCH AND PLANNING SECTION

MATTHEW TAYBACK, Sc.D.
Assistant Commissioner of Health

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation."

Quetelet

Inquiries concerning the materials published, should be addressed to Mr. Todd M. Frazier, Director, Bureau of Biostatistics, Baltimore City Health Department, Baltimore 3, Maryland.

Table of Contents

	Page
A Summary of Vital Records	1 - 14
B Annual Rates by Month for Births and Selected Causes of Death	15
C Table of Vital Events	16 - 18
I Marriages, Births, Deaths by Race	16
II Deaths from Selected Causes	17
III Cases and Deaths from Selected Causes and Infant Deaths by Health Districts	18

Comments on the Vital Statistics of Baltimore - 1959

Among the more favorable developments in the health of the city during 1959 were: (1) a decline of 22 per cent in deaths from tuberculosis when compared with the 1958 experience; (2) the achievement of a record low maternal mortality rate; and (3) limitation of the incidence of illness from the acute communicable diseases to levels indicative of satisfactory control. A number of circumstances adversely affecting the physical and social health of young children including the incidence of illegitimacy, the extent of prematurity at birth, and relatively high levels of infant mortality, showed no evidence of change. In addition a record high number of individuals were injured due to automobile accidents which occurred in Baltimore City in 1959.

The death rate from all causes, a crude index of the general health of the community was 11.3 in 1959 a drop of 3 per cent from the rate of 11.7 for 1958. The difference in the number of deaths represented by these rates is primarily due to a decline in mortality ascribed to tuberculosis and to diseases of the heart. Deaths from violence, suicide and homicide, the magnitude of which often reflects social and economic circumstances, dropped unexpectedly in 1959. There were 89 deaths due to suicide in 1959 compared with 95 in 1958 and 97 in 1957. Homicides which averaged 97 in the two year period 1957-1958 were down to 80 in 1959. No ready explanation can be offered to account for these differences.

Population

The number of residents of Baltimore City on July 1, 1959 was estimated as 987,000, of which 313,000 or 32 per cent was colored. Continuing a trend which has been consistent since 1943, the size of the white community

dropped 1 per cent from 681,000 in 1958 to 674,000 in 1959, and the colored population increased 4 per cent from 301,000 to 313,000. As the white population declines in size, significant changes are noted in the age profile, the most important of which is the rapid growth of the fraction which the aged population constitutes. In contrast, as the nonwhite population increases, the growth appears to be of marked proportions in the age groups under fifteen years.

The impact of the changes taking place in the population in Baltimore City is such that the proportion of non-productive elements to the productive population increases, which among several other reasons accounts for rapidly growing public responsibilities in education and medical care even though the total population grows but modestly.

Maternal and Child Health

For the second year in a row a decline in the number of births to residents of Baltimore City has occurred and there has been a parallel drop in the total number of births in the Baltimore hospitals. There were 22,883 resident live births in 1959 a drop of 581 from 1958 and approximately 1,200 below the record high figure of 25,067 reached in 1957. The racial composition of the annual birth crop changes remarkably. Thus in 1959, there were 11,307 nonwhite births or 47.3 per cent of the total. By contrast, in 1958, 1950 and 1940 this percentage was 45, 34 and 26 respectively. It may be expected that in 1960 the number of colored births will equal the white births. The birth rate for 1959 was 24.2 per 1,000 population; the white rate was 18.7 and the colored rate 36.1.

In spite of relatively high levels of medical indigency and a large number of socially and economically depressed families in the city, the maternal mortality records achieved in the past have been phenomenally low. In 1959 a new low record rate of 2.9 maternal deaths per 10,000 live births was reached. The equivalent rates for white and nonwhite mothers were 1.6 and 4.4 respectively, which accounted for a total of 7 maternal deaths.

There are additional dimensions by which it is possible to measure in a meaningful way the level of maternal and child health. From a social point of view one is concerned with the integrity of the family in which the child will be reared. A rough measure of this characteristic is provided by examination of the illegitimacy ratio, the number of illegitimate births per 100 live births. Estimates of this index are made each year by study of birth certificates registered in the Bureau of Vital Records. In 1959 the illegitimacy ratio among nonwhite births was 31 per cent and 4 per cent for the white babies. The ratio has remained relatively constant in the nonwhite population for several decades. However, when this constant ratio is applied to an increasing number of births the frequency of illegitimate infants becomes an overwhelming and near catastrophic problem. For example in 1950 there were 2,300 colored illegitimate infants born. In 1959, with the same ratio prevailing, the number of colored illegitimate children was 3,700, an increase of 60 per cent. Responsible thinkers have expressed the view that the problem will be self-limiting as the nonwhite population becomes acclimated to urban society mores. There is evidence that though this may be logical to expect, the actual experience is otherwise. In a recent study made in the Research and Planning Section the illegitimacy ratio among Negro mothers born in Baltimore City and

Maryland was more than 50 per cent higher than that found among mothers born in the southern states. Complacency about this problem will impose heavy economic burdens upon the community and serious barriers upon the social development of large numbers of children.

Infants Continue to Die as Premies are Neglected

It is extremely disappointing, that the success which attends the efforts of the medical profession and others concerned with minimizing maternal risk of death, has not equally characterized the efforts of those concerned with minimizing the risk of death among newly born infants. In 1959, the infant mortality rate among white infants was 25.1 deaths per 1,000 liveborn, about the same as the 1956-1958 average rate of 25.3 and 20 per cent higher than the lowest recorded white rate in 1952. The infant mortality rate for colored infants was 45.8, up somewhat from the figure of 44.0 for the average of the years 1956-1958. When compared with the lowest recorded non-white infant mortality rate of 37.2 for 1953 the loss of colored infant lives had risen by 23 per cent. During a decade when medical progress was dramatic and expected, the unfavorable outcome which has accompanied the care of newborn premature infants has been studied carefully and persistently. The record is clear that all but an insignificant part of the recent increase in infant mortality is due to a deterioration of the care afforded premature infants within the first four weeks of life.

An example of the difficulty which has developed in respect to the care of these infants is provided by the following table which describes the

probability of neonatal death during a base period 1954-1956 for separate weight groups compared with the most recent recorded experience, July 1, 1958 - June 30, 1959.

Weight Specific Neonatal Death Rates
(Deaths Per 1,000 Livebirths)

<u>Birthweight Group</u>	<u>1954-1956</u>	<u>1958-1959</u>
1,000 grams and under	879	947
1,001 - 1,500	467	536
1,501 - 2,000	158	191
2,001 - 2,500 (4 lbs.6 oz.-5 lbs.8 oz.)	27	42

It is the intent of the Baltimore City Health Department to insist more vigorously that standards of care for the newborn prescribed in the City Maternity Hospital Ordinance and Regulations, and recommended by the American Academy of Pediatrics be conscientiously followed by all hospitals in which obstetrics is practiced.

Closely allied with the problem of high neonatal mortality rates is the problem of prematurity, the birth of an infant with weight less than 2,500 grams or $5\frac{1}{2}$ pounds. Not only is the premature infant subject to a high risk of death, but if he survives, he is subject to a five-fold increase in the frequency of serious neurological defect as compared to a full-term infant. In studies of this problem to date by the City Health Department's Research and Planning Section the following pertinent observations have been made:

- (1) There is marked racial difference in the incidence of prematurity; 8 per cent of white infants born alive are premature while 14 per cent of liveborn colored infants are premature.

- (2) Social-economic status is one of several factors which is associated with the extent of prematurity among white infants although even among the most favored group of mothers, 5 per cent of liveborn infants are premature.
- (3) Work during pregnancy increases the risk of prematurity.

While attending to the problem of reducing to a minimum the risk of death among premature infants and assisting children with neurological defects present at birth, the Baltimore City Health Department is determined to continue its investigations into the causes of prematurity and to give priority to those services which on rational bases appear to offer sound potentials for the prevention of prematurity.

Mental Hygiene

During 1959, a program of clinic services, education and research has been molded into a Bureau of Mental Hygiene designed to promote healthy behavioral patterns in children and thereby to set the basis for reducing the amount of serious mental illness found in adults. In order to quantify the extent of mental illness in the community, arrangements have been made to secure systematic reports from the state mental hospitals and from various psychiatric clinics which offer services on an outpatient basis to Baltimore residents. There is no prior data of this type available. Consequently, no ready interpretation can be made now, but with the start which was possible in 1959, an objective evaluation of efforts in this great public health problem area will become feasible in the future.

The number of Baltimore residents on the registers of the state mental hospitals was 6,403 on July 1, 1959. This excludes 1,123 residents of Baltimore who were patients at Rosewood, and who must be considered as mentally deficient rather than mentally ill. In addition there were 2,300 patients receiving medical services through outpatient clinics, in which total we have given no account to the children seen by the Division of Special Services of the City Department of Education, many of whom are seriously handicapped due to emotional maladjustment. Nor is there data available on the number of residents with clearly definable mental illness who are patients under the care of psychiatrists or in private voluntary or veterans hospitals.

Tuberculosis

If mental illness may be regarded as the most widely prevalent seriously disabling disease in this community affecting at any given time no less than 10,000 residents or 1 per cent of the population and referred to by the Commissioner of Health as "the smallpox of today", then tuberculosis may claim status as the second most important problem of public health consequence, at least in Baltimore. It is no exaggeration to state that as this disease recedes throughout the country, one of the principal remaining foci will be found in this city, unless an accelerated program of control is undertaken.

With funds made available by the Maryland Tuberculosis Association it has been possible to obtain a current and accurate assessment of the extent to which tuberculosis is prevalent in Baltimore City. On July 1, 1959 a total of 3,451 persons were ill with tuberculosis of whom 1,573 were white and 1,878 were colored. The respective prevalence rates per 100,000 population were:

total, 350; white, 234; and colored, 600. Of these cases 866 or 25 per cent were in tuberculosis hospitals, 70 per cent were receiving care either from private physicians or from the Baltimore City Health Department chest clinics, or other institutions and 190 or 5 per cent were under no medical supervision. A vigorous follow-up effort is made to place persons in this last category under medical care because they constitute dangerous foci for the spread of infection with tuberculosis. Compulsory hospitalization for three such cases was instituted for the first time in Baltimore City in 1959.

The level of mortality due to tuberculosis which has declined markedly since the introduction of streptomycin, isoniazid and similar anti-tuberculosis drugs fell 22 per cent from the 1958 level of 186 deaths to 145 in 1959. However, the increment of new disease during this past year amounting to 833 cases constituted only a modest decline of 7.3 per cent from the incidence of 899 cases in 1958. The respective newly reported case rates per 100,000 population in 1959 were: total, 84; white, 56; and colored, 145.

The control program for tuberculosis suffered a grievous blow when at the start of 1959, a total of 13 nurse positions was dropped from the department budget. A request for restoration of several of these positions in 1960 has been denied. In addition a developing crisis in nurses' salaries was not relieved because essential increases were denied for 1960. Thus, do we find dollars again fighting for disease and not against it, and producing in the end the need for expenditures well beyond what is required for prevention. Each bed occupied in a tuberculosis hospital costs \$3650 per year. If 14 cases, less than 2 per cent of the annual cases, requiring hospitalization were prevented each year the saving in hospital cost would be approximately \$50,000.

Other Communicable Diseases

No case of diphtheria was recorded in Baltimore during 1959. This is a repetition of the ultimate in the eradication of this disease first achieved for the year 1957. Three cases of typhoid fever were reported for residents of Baltimore City in 1959, two of which were in children and the third an accidental infection of a laboratory worker. Infectious hepatitis reached a record high incidence in 1959 with 296 cases reported. An analysis of the time sequence of this outbreak indicates that the disease reached peak levels in the first quarter of the year after giving evidence of increasing in frequency during the latter half of 1958. This illness spreads through a city like measles. It is reasonable to believe that there will be a return to the usual incidence rates in 1960. Mumps which runs a biennial pattern and was extremely low in 1958 with 283 cases was up to 675 cases in 1959. Measles which also seems to run in a biennial pattern was down to 1,150 reported cases this past year as contrasted with 3,723 in 1958. Whooping cough, a disease which was as common as measles until 1947 and which few adults today have escaped was reported among 112 children in 1959 which does not match the record low figure of 35 in 1958 but nevertheless is suggestive of effective control reached through the wide use of the pertussis vaccine.

Since 1955, the Baltimore City Health Department together with the community's physicians have been actively engaged in a vast effort to inoculate the child population with poliomyelitis vaccine. Surveys carried out by the Bureau of Biostatistics indicate that at this time 72 per cent of the population under 20 years of age have received three doses of vaccine, while 11 per cent have not been inoculated to any extent. The task of further protecting the

population against poliomyelitis can be structured as follows: (1) increase the primary inoculation levels among preschool age children in lower social-economic areas; (2) assure that children entering school have at least a primary series of three shots and preferably a fourth shot; and (3) encourage parents to secure a fourth shot for all school-age children who have completed the primary series.

There were 15 cases of paralytic poliomyelitis reported in 1959 which is up from the 11 cases in 1958 and 7 cases in 1957, but nevertheless well below what would be expected in the absence of the poliomyelitis vaccine.

From the point of view of expenditures of money and effort, the treatment of venereal diseases is a burdensome public responsibility which falls heavily upon communities where significant segments of the population are engaged in promiscuous sexual relations. Fortunately the discovery of penicillin and the development of potent and long acting forms of this drug have provided powerful tools for controlling the serious chronic conditions which frequently followed untreated cases of syphilis and gonorrhea. With the assistance of the U. S. Public Health Service, the Baltimore City Health Department has found it possible to intensify its case-finding efforts for detection of syphilis. As a result, in 1959 a total of 1,577 new cases of syphilis was reported which is up considerably from the figure of 1,199 recorded in 1958. This increase, however, does not give indication of a significant rise in the current risk of infection since many of the cases newly reported were further diagnosed as infections of long duration. The number of new current infections as represented by cases of primary and secondary syphilis was 191 in 1959, approximately the same as the 193 cases reported for 1958.

Accidents

The machine age has provided us with the capability of providing a high standard of living to an increasing fraction of the population. In a direct way this has contributed immensely to the health of the community by assuring nutritional levels sufficient to increase resistance to diseases which thrive on poverty and malnutrition. However, particularly in the case of the automobile it appears that we have created a machine with proven capabilities for enriching life but with a vast potential and a terrific actual achievement in producing death or extensive damage for human beings.

Data on the frequency and severity of automobile accidents are made available to this department by the Central Records Bureau of the City Police Department. In 1959 the total of individuals injured in automobile accidents was 8,550, the highest such figure on record since automobile accident information has been systematically collected. Comparable and other detailed statistics for previous years are shown below.

Automobile Accident Experience in Baltimore City 1954-1959

<u>Year</u>	<u>Accidents Reported</u>	<u>Persons Injured</u>	<u>Persons Killed</u>
1959	17,800	8,550	107
1958	16,650	7,625	107
1957	17,991	8,102	110
1956	19,429	8,360	110
1955	18,049	7,646	94

To a certain extent failure to achieve a reduction in automobile accident injuries is due to the rapid increase in the number of vehicles on the road. It is reported by Dr. Russell S. Fisher, Chief Medical Examiner of Maryland, that more than 50 per cent of fatal motor accidents are related to alcohol, either in the driver, a pedestrian or some related individual. It is reasonable to suppose also that present control measures however varied and costly they may be, are nevertheless inadequate to influence in a significant way the current accident levels. Three additional procedures will soon be added, the penalty point system to be administered by the State Department of Motor Vehicles, the use of chemical tests of drivers for alcohol to assist law enforcement officers in establishing the facts related to alleged drunken driver cases, and an expansion of driver education courses for high school students. In addition, individual car owners can take the initiative of providing safety belts for passengers in their cars, a device proven to be an important means of preventing serious injury whenever a collision occurs.

Principal Causes of Death

More than one quarter of a billion dollars is now invested annually by the Federal Government for the purpose of financing a nationwide research effort in the prevention and treatment of serious disease and particularly towards investigations in the area of those diseases which are the principal killers, cancer and heart disease. Brilliant breakthroughs in the wall of ignorance which clouds our understanding of these conditions are bound to come. The hard facts are that no substantial progress has been made in reducing the toll of lives lost to cancer at least in the past decade. Indeed, it is incongruous in the extreme, that when one bright discovery was made,

the demonstration of a causal relation between smoking of cigarettes and lung cancer, so much fog was raised that little benefit accrued to the ordinary citizen. It is a tragedy that the facts on this matter cannot be delivered in an understandable manner to the public who can then determine individually whether the risk entailed in smoking of cigarettes is worth the pleasure received.

During 1959, 1,824 residents died from cancer, an increase of three per cent from 1958. The cancer death rate was thus 185 per 100,000 population and has been rising gradually, primarily due to the aging of the population within the city.

Diseases of the heart accounted for 4,708 deaths in 1959, a drop from the 1958 level of 4,822 which was believed to have been especially high due to late effects of the Asian influenza outbreak in the fall of 1957.

Deaths from pneumonia continue at unexpectedly high levels. In 1959, there were 411 deaths from pneumonia which was quite similar to the experience of 1958 when 415 deaths were ascribed to this disease. These levels however are significantly higher than those recorded for any year subsequent to 1945 when penicillin became increasingly available for civilian use. This situation demands careful attention for it would suggest that current antibiotics are unable to provide protection against the risk of death from pneumonia to the same extent as this was possible during the period 1945-1956.

Conclusion

In spite of extraordinary financial limitations imposed upon the Baltimore City Health Department in 1959 with staff reduction, there were

fortunately no instances of catastrophic outbreaks of preventable illness. However, less than powerful efforts made towards the control of tuberculosis, in the provision of prenatal services to all indigent mothers early in pregnancy, and in similar routine functions produces an insidious toll of human lives and impaired children just as surely as an epidemic outbreak of a specific disease.

The City Health Department is under considerable pressure to extend its services to the chronically ill adult and to increase its efforts in behalf of crippled children. There is no question about the desirability or need for public concern with these problems. However, when the current program for the prevention of such great problems as prematurity, infant mortality, tuberculosis, lead paint poisoning and behavioral problems in children, proves difficult to finance and man adequately, perhaps it will be understood why the Baltimore City Health Department cannot extend itself in many desirable directions at this time.

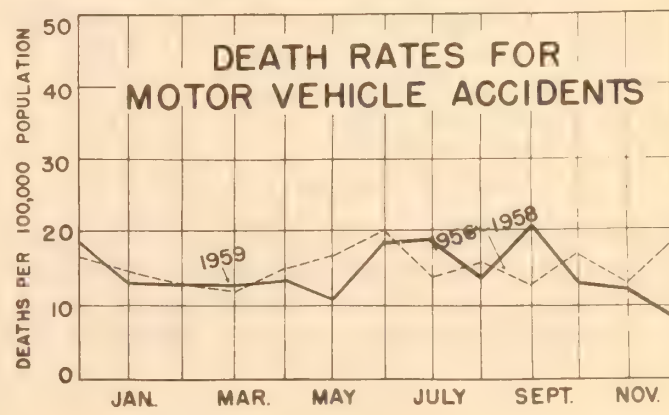
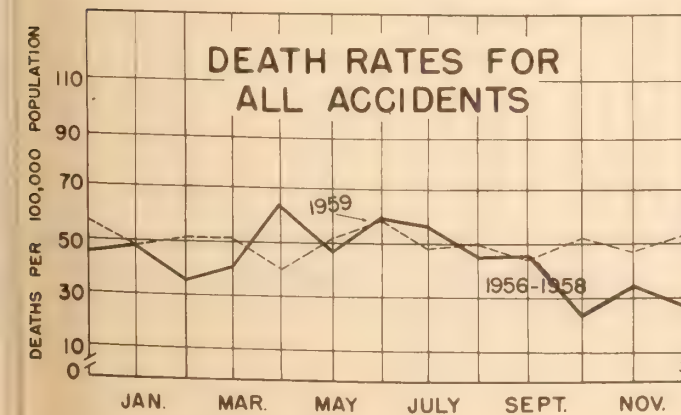
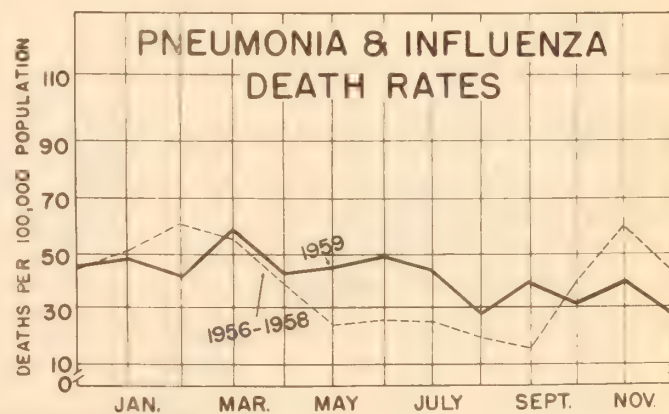
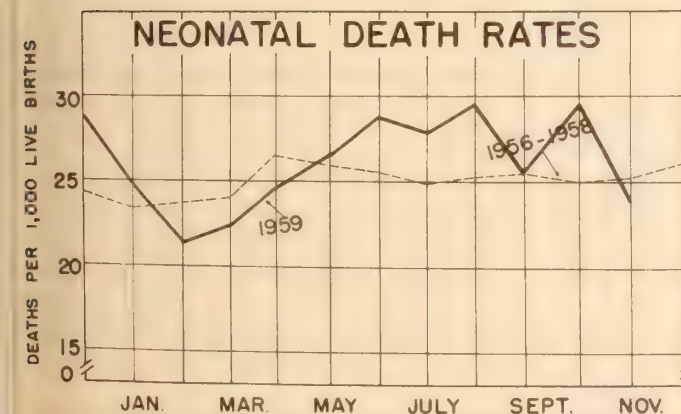
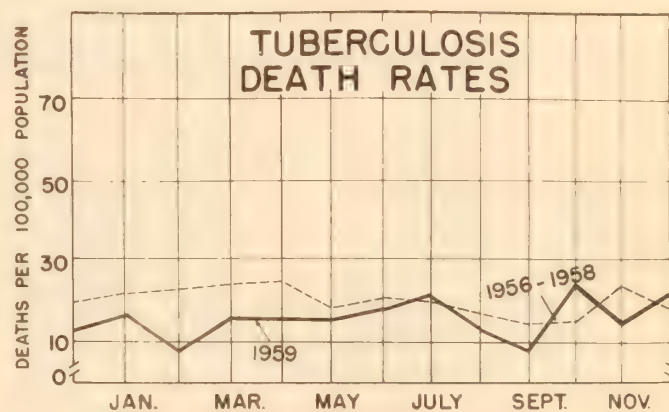
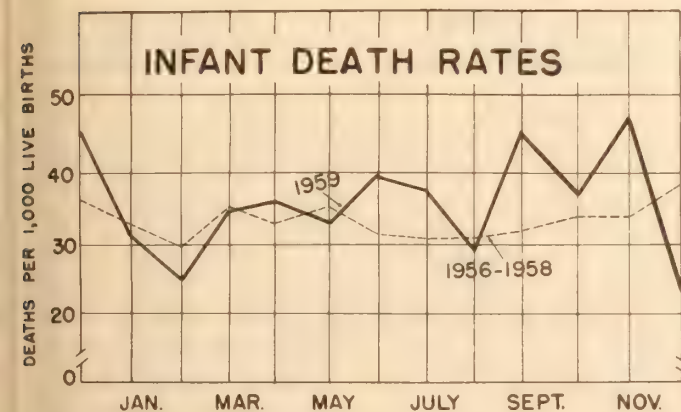
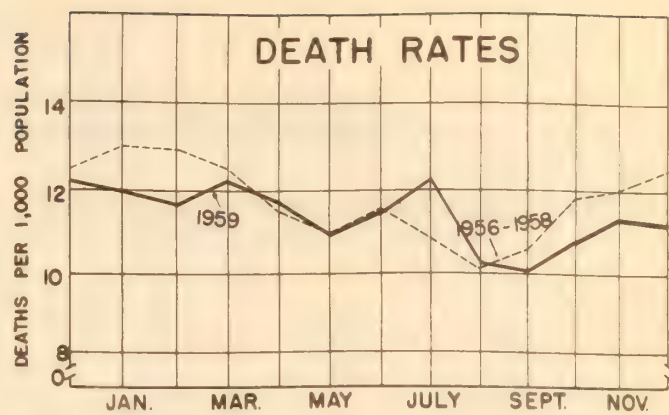
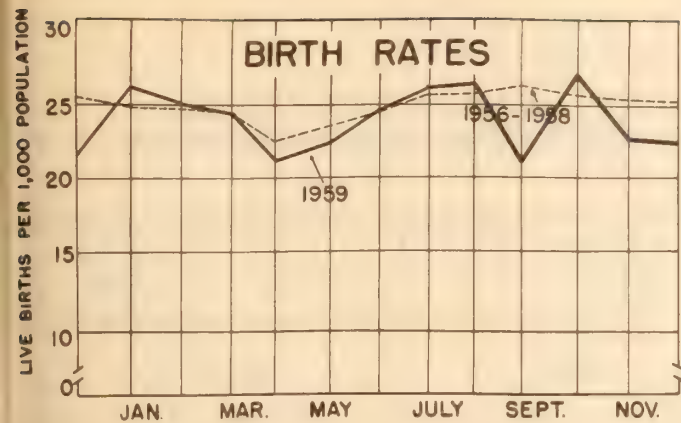


TABLE I

MARRIAGES RECORDED, RESIDENT BIRTHS, DEATHS AND INFANT DEATHS
AND CORRESPONDING RATES BY RACE: FOURTH QUARTER, 1959 AND 1956-1958

Vital Event	October - December				January - December	
	Number		Rate*		Rate*	
	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58
ALL RACES						
Marriages recorded.....	2,274	2,485	9.1	10.1	9.7	10.7
Births.....	6,020	6,359	24.2	25.9	24.2	25.1
Deaths, all causes.....	2,761	2,963	11.1	12.1	11.3	11.7
Deaths, under one year.....	217	226	36.0	35.5	34.9	33.4
under 28 days.....	143	160	23.7	25.2	24.9	25.0
28 days-11 months.....	74	66	12.3	10.3	10.0	8.4
WHITE						
Marriages recorded.....	1,405	1,587	8.3	9.2	9.0	10.0
Births.....	3,194	3,595	18.8	20.7	18.7	20.2
Deaths, all causes.....	1,961	2,098	11.5	12.1	11.7	11.9
Deaths, under one year.....	78	92	24.4	25.6	25.1	25.3
Under one year.....	55	66	17.2	18.4	18.3	19.2
28 days-11 months.....	23	26	7.2	7.2	6.8	6.1
NONWHITE						
Marriages recorded.....	869	898	11.0	12.5	11.2	12.4
Births.....	2,826	2,764	35.8	38.4	36.1	36.8
Deaths, all causes.....	800	865	10.1	12.0	10.4	11.2
Deaths, under one year.....	139	134	49.2	48.5	45.8	44.0
under 28 days.....	88	94	31.1	34.0	32.4	32.6
28 days-11 months.....	51	40	18.1	14.5	13.4	11.4

*Infant mortality rates are per 1,000 live births. All other rates -- marriage, birth and death -- are on an annual basis per 1,000 population estimated as of July 1, 1959 -- total 987,000, white 674,000, nonwhite 313,000.

TABLE II

RESIDENT DEATHS FROM SELECTED CAUSES
FOURTH QUARTER, 1959 AND 1956-58

Cause of Death	October - December				January - December	
	Number		Rate per 100,000*		Rate per 100,000*	
	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58
All Causes	2,761	2,963	11.1	12.1	11.3	11.7
Tuberculosis (001-019).....	39	47	15.7	19.2	14.7	19.9
Syphilis (020-029).....	8	14	3.2	5.7	3.6	5.4
Cancer (140-205).....	431	470	173.2	191.5	184.8	187.6
Diabetes Mellitus (260).....	56	56	22.5	22.8	23.1	24.9
Vascular Lesions of the Central Nervous System (330-334).....	214	224	86.0	91.3	87.9	89.5
Disease of the Heart (410-443).....	1,179	1,259	473.9	513.1	477.0	492.2
Influenza and Pneumonia (480-483, 490-493).....	84	118	33.8	48.1	41.6	38.5
Nephritis and Nephrosis (590-594).....	24	29	9.6	11.8	9.7	10.6
Periperal Causes (640-652, 670-689).....	2	3	0.8	1.2	0.7	1.3
Congenital Malformations (750-759).....	36	35	14.5	14.3	12.1	13.9
Certain Diseases of Early Infancy (760-776).....	130	142	52.3	57.9	54.0	55.0
Homicides (963, 970-979).....	24	20	9.6	8.2	9.0	10.0
Infanticides (964, 980-999).....	21	19	8.4	7.7	8.1	9.1
Accident (800-802, 810-835, 840-963)...	73	125	29.3	50.9	44.4	50.2
Motor Vehicle (810-835).....	28	40	11.3	16.3	14.4	15.5

*Rates shown for all cases are per 1,000 population.

Table III

CASES AND DEATHS FROM SELECTED CAUSES, AND INFANT DEATHS BY HEALTH DISTRICTS
FOURTH QUARTER, 1959 and 1956-1958 AVERAGE

Cause of illness and Death	*Total City		Eastern		Southeastern		Southern		Western		Druid		Northern	
	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58	1959	Average 1956-58
Infant deaths	217	226	87	68	16	26	19	21	30	32	36	51	25	27
Tuberculosis Cases all forms Deaths	174 39	247 47	47 12	68 10	19 5	37 8	20 3	22 5	19 1	27 6	52 9	62 16	15 7	31 2
Syphilis Cases Deaths	334 8	333 14	78 4	87 3	26 0	17 1	17 0	17 0	29 0	35 3	140 4	141 5	40 0	31 2
Typhoid fever Cases Deaths	0 0	1 0	0 0	0.3 0	0 0	0 0	0 0	0 0	0 0	0.3 0	0 0	0.3 0	0 0	0 0
Diphtheria Cases Deaths	0 0	0.3 0.3	0 0	0 0	0 0	0.3 0.3	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Whooping cough Cases Deaths	34 0	22 0	12 0	11 0	5 0	1 0	6 0	2 0	2 0	2 0	6 0	6 0	3 0	0 0
Measles Cases Deaths	151 0	506 1	22 0	220 0.6	19 0	56 0	16 0	46 0	29 0	39 0	41 0	84 0	24 0	61 0.3
Acute poliomyelitis (Paralytic) Cases Deaths	6 0	7 0.3	0 0	1.3 0.3	1 0	0.6 0	3 0	1 0	0 0	1.6 0	1 0	1.3 0	1 0	1 0

All figures corrected for residence within Maryland.

*Totals include some intrastate transfers allocated to Baltimore City but not otherwise allocated to health districts.

**BALTIMORE CITY HEALTH DEPARTMENT
RESEARCH AND PLANNING SECTION**

Maryland Room
University of Maryland Library
College Park, Md.

**QUARTERLY
STATISTICAL
REPORT**

MARRIAGES

BIRTHS

MORTALITY

MORBIDITY

FIRST & SECOND QUARTERS 1960

AUGUST 24, 1960

VOL. 12 NOS. 1 & 2

BALTIMORE CITY HEALTH DEPARTMENT

HUNTINGTON WILLIAMS, M.D.
Commissioner

RESEARCH AND PLANNING SECTION

MATTHEW TAYBACK, Sc.D.
Assistant Commissioner of Health

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation."

Quetelet

Inquiries concerning the materials published, should be addressed to Mr. Todd M. Frazier, Director, Bureau of Biostatistics, Baltimore City Health Department, Baltimore 3, Maryland.

Table of Contents

	Page
A Summary of Vital Events	1 - 2
B Annual Rates by Month for Births and Selected Causes of Death	3
C Morbidity Rates by Month	4
D Tables of Vital Events	
<u>First Quarter</u>	
I Marriages, Births, Deaths by Race	5
II Deaths From Selected Causes	6
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	7
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths and Tuberculosis Hospital Admissions	8
<u>Second Quarter</u>	
I Marriages, Births, Deaths by Race	9
II Deaths From Selected Causes	10
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	11
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths and Tuberculosis Hospital Admissions	12
E Implications of the Changing Character of the Baltimore City Medical Care Program Population	13 - 20



Vital Events - Baltimore, Maryland

January-June, 1960

Marriages and Births

The number of marriages recorded in Baltimore for the first six months of 1960, 9.4 per 1000 population, remained at a level characteristic of the years 1935-1939 when the nation's economy was seriously depressed. The current low rate of marriages which has been apparent for two years is in part due to the relatively small cohorts now attaining ages at which marriages normally occur.

Total resident births numbered 11,056 for the first half of 1960, a decrease of 605 from last year. This is the third consecutive year that the number of births to residents of the city has declined. Nonwhite resident births in the first six months of the year numbered 5,315, a decrease of 219 from the number in the same period last year. This is the first time since the war years of 1944 and 1945 that nonwhite births have not increased in number.

Mortality

During the first half of 1960 there were 6,187 resident deaths from all causes for a rate of 12.6 compared to an average of 11.9 for the first six months of the years 1957-1959. Deaths ascribed to cancer, vascular lesions of the central nervous system, diseases of the heart, influenza and pneumonia and congenital malformations accounted for this increase. There was a 60 per cent increase in the influenza and pneumonia death rate during the first quarter of 1960 compared to the same period in the years 1957-1959. Deaths reported during January and February accounted for this marked increase.

Infant and Maternal Mortality

Infant mortality continued to increase during the first six months of 1960. It is now at a level of 35.8 deaths per 1000 live born infants compared to 34.6 for the same periods during 1957-1959, years which reflect an unfortunate increase over

the infant mortality rates previously achieved in Baltimore. As noted in 1959, the post neonatal rates accounted for the current increase in infant mortality. Deaths among infants in the age group 28 days through 11 months produced a death rate of 11.4 for the first six months of this year compared to an average of 8.8 in the years 1957-1959. Three maternal deaths occurred during the first half of this year.

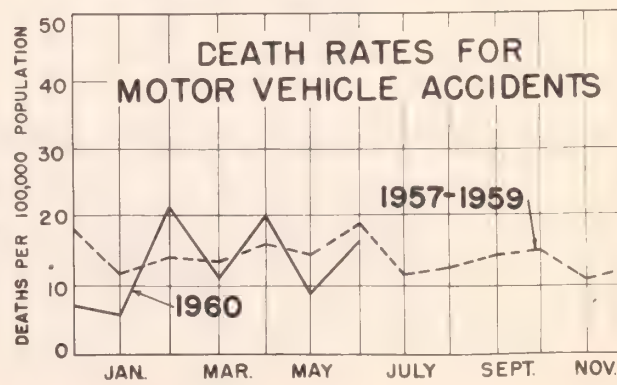
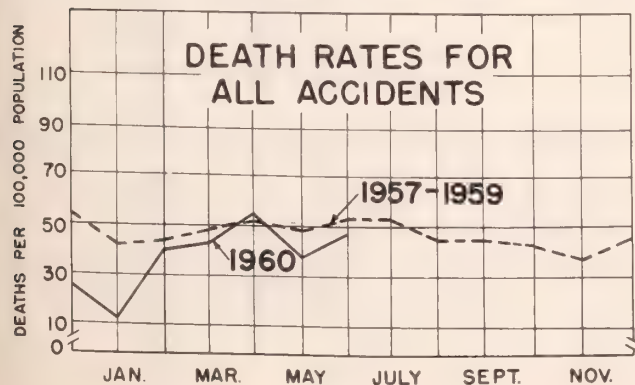
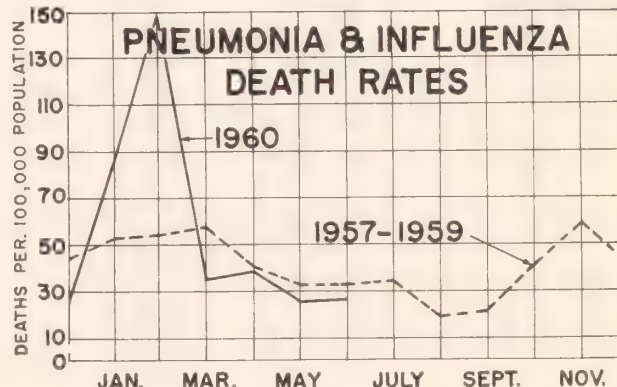
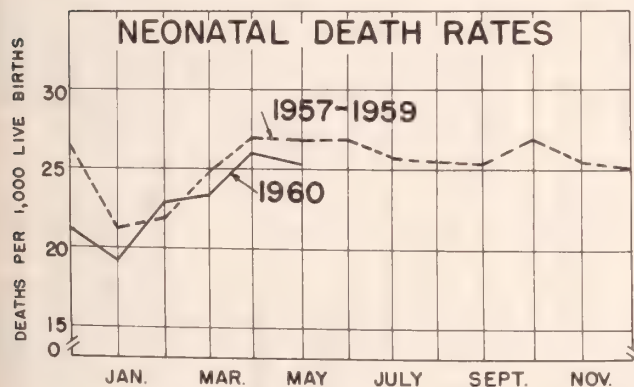
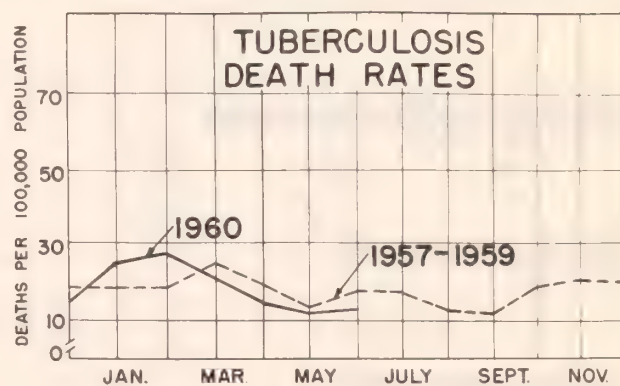
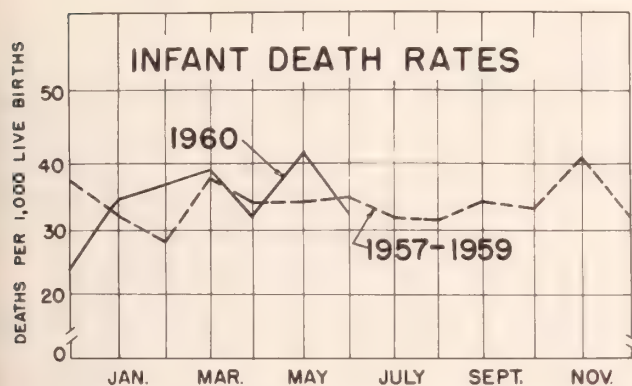
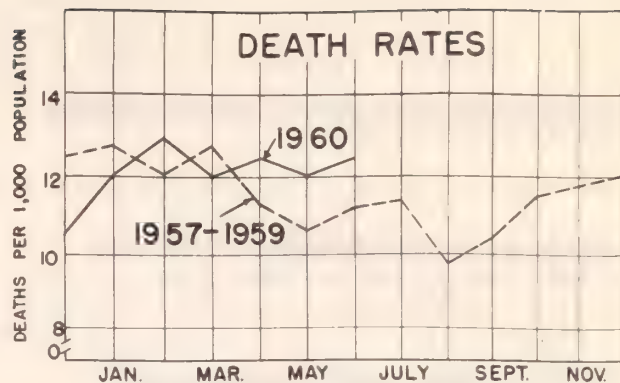
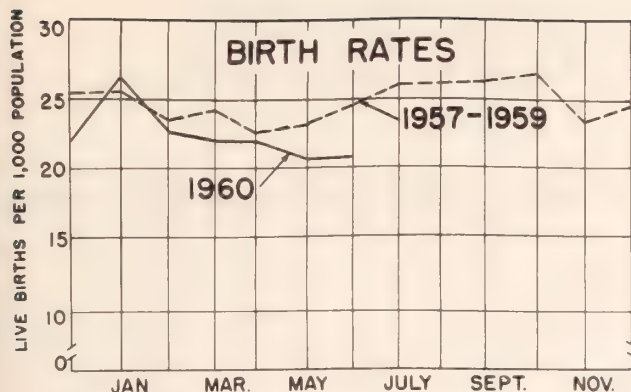
Morbidity

A total of 1,983 cases of measles was reported for the months January-June, 1960. Ten cases of meningococcal infections were reported in this period compared to an average of five for the three years 1957-1959.

Table IV will appear in the Quarterly Statistical Report henceforth. It is published to draw attention to the progress of tuberculosis control, one of the most important remaining problems in the field of communicable diseases.

On January 4, 1960, a continuous surveillance of the health of the city's population was inaugurated.* This survey known as "The Baltimore Health Survey" is used in part to obtain information on the extent of illness in the city's population. The proportion of persons interviewed who reported an illness in the two week period prior to interview is shown by month for the first six months of 1960 in Figure 2.

* Baltimore Health Survey; Objectives, Design and Summary of Results for the First Quarter 1960. Special Statistical Report, Research and Planning Section, Baltimore City Health Department, May 16, 1960.



BALTIMORE CITY HEALTH DEPARTMENT
BALTIMORE HEALTH SURVEY

MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS, (275-325 PERSONS) MONTH BY MONTH
1960

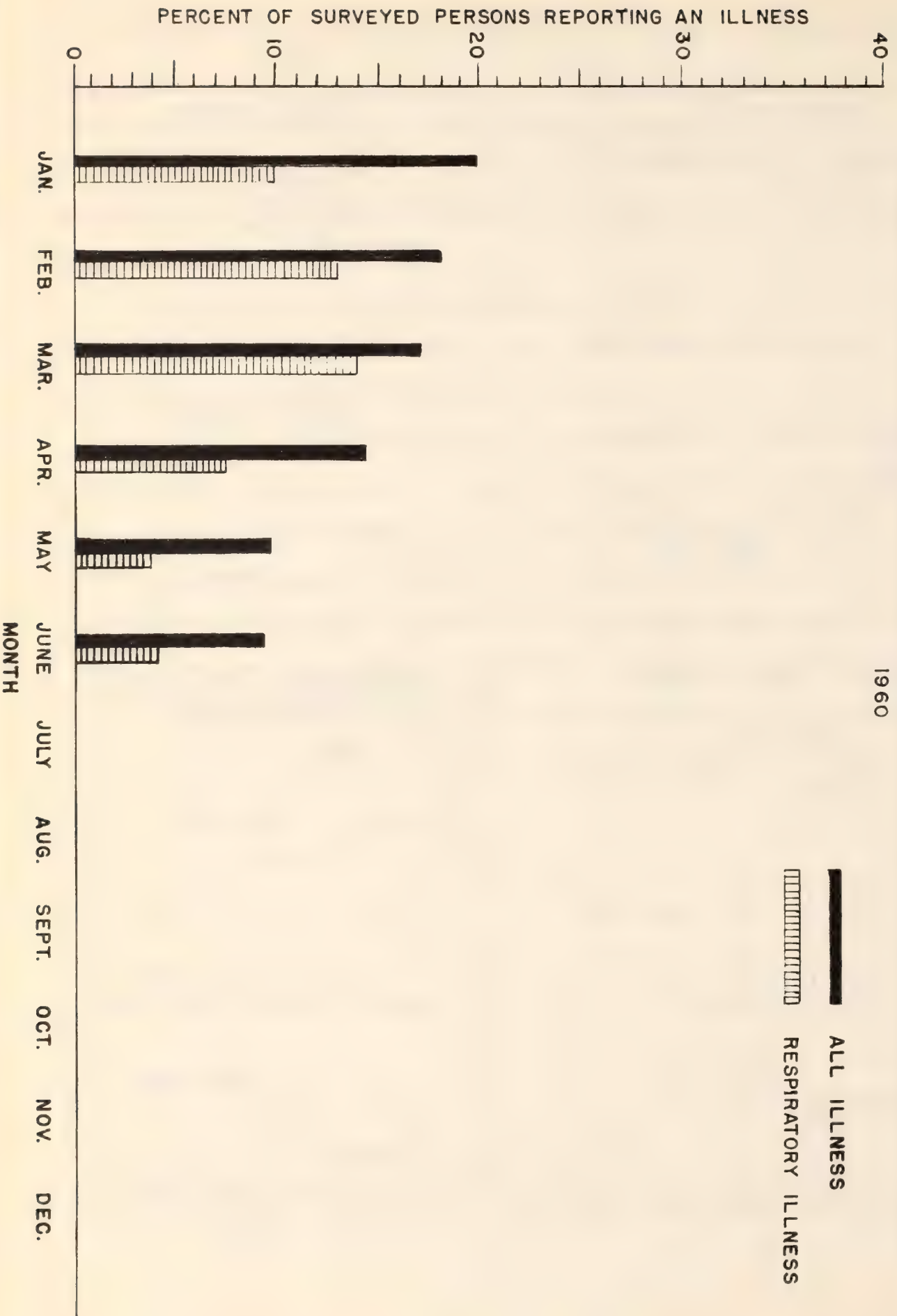


Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: First Quarter, 1960 and 1957-1959

Vital Event	JANUARY - MARCH			
	Number		Rate*	
	1960	Average 1957-59	1960	Average 1957-59
	All Races			
Marriages recorded.....	2,026	2,097	8.3	8.7
Births.....	5,849	5,983	23.8	24.7
Deaths, all causes.....	3,439	3,042	14.0	12.6
Deaths, under one year.....	212	201	36.2	33.6
under 28 days.....	136	145	28.0	24.2
28 days-11 months.....	76	56	13.0	9.4
White				
Marriages recorded.....	1,158	1,322	6.9	7.9
Births.....	2,990	3,315	17.8	19.7
Deaths, all causes.....	2,424	2,183	14.5	13.0
Deaths, under one year.....	93	87	31.1	26.2
under 28 days.....	62	64	20.7	19.3
28 days-11 months.....	31	23	10.4	6.9
Nonwhite				
Marriages recorded.....	868	775	11.2	10.4
Births.....	2,859	2,668	36.7	35.9
Deaths, all causes.....	1,015	859	13.0	11.5
Deaths, under one year.....	119	114	41.6	42.7
under 28 days.....	74	81	25.9	30.4
28 days-11 months.....	45	33	15.7	12.4

*Infant mortality rates are per 1,000 live births. All other rates—marriage, birth and death—are on an annual basis per 1,000 population estimated as of July 1, 1959—total population 987,000, white, 674,000, nonwhite, 313,000.

Table II

Resident Deaths From Selected Causes
First Quarter, 1960 and 1957-1959

Cause of Death	JANUARY - MARCH			
	Number		Rate Per 100,000*	
	1960	Average 1957-59	1960	Average 1957-59
All Causes.....	3,402	3,053	13.9	12.6
Tuberculosis (001-019).....	57	49	23.2	20.2
Syphilis (020-029).....	5	13	2.0	5.4
Cancer (140-205).....	497	460	202.5	189.8
Diabetes mellitus (260).....	67	66	27.3	27.2
Vascular lesions of the central nervous system (330-334).....	276	234	112.5	96.6
Diseases of the heart (410-443).....	1,436	1,344	585.2	554.7
Influenza and pneumonia (480-483, 490-493).....	215	132	87.6	54.5
Nephritis and nephrosis (590-594).....	25	23	10.2	9.5
Puerperal causes (640-652, 670-689).....	2	5	.8	2.1
Congenital malformations (750-759).....	45	28	18.3	11.6
Certain diseases of early infancy (760-776).....	139	127	56.6	52.4
Suicides (963, 970-979).....	28	25	11.4	10.3
Homicides (964, 980-999).....	30	17	12.2	7.0
Accidents (800-802, 810-835, 840-962)...	74	108	30.2	44.6
Motor vehicles (810-835).....	31	33	12.6	13.6

*Rates shown for all causes are per 1,000 population.

TABLE III

CASES AND DEATHS FROM SELECTED CAUSES, AND INFANT DEATHS BY HEALTH DISTRICTS
FIRST QUARTER, 1960 AND 1957-1959 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Southeastern		Southern		Western		Druid		Northwestern	
	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59
Infant deaths	212	201	77	62	29	20	15	22	39	28	50	43	2	25
Tuberculosis Cases	210	235	62	69	35	23	17	23	50	32	45	59	0	28
Deaths	57	49	16	17	2	6	9	5	13	6	14	11	3	4
Syphilis Cases	356	325	83	81	26	19	24	13	98	40	118	132	0	31
Deaths	5	13	3	3	0	0.3	0	0.7	0	1	2	7	0	1
Typhoid Cases	0	0.3	0	1	0	0	0	0	0	0	0	0	0	0
Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Whooping Cases	11	17	2	10	2	0.7	0	1	5	0.7	2	4	0	1
Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Meningococcal Cases	7	3	3	0.7	1	0.3	0	0.3	2	1	1	0.7	0	0
Deaths	4	1.3	2	0	0	0	0	0	1	0.7	1	0.7	0	0
Measles Cases	1081	999	330	337	125	125	68	54	256	78	302	235	0	170
Deaths	0	1.3	0	0.3	0	0	0	0.3	0	0	0	0	0	0
Acute polio- myelitis (paralytic) Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0	0

All figures corrected for residence within Maryland.

*Totals include some intrastate transfers allocated to Baltimore City but not otherwise allocated to Health Districts

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths and Tuberculosis Hospital Admissions
First Quarter 1960 and 1959

	JANUARY - MARCH	
	Total	
	1960	1959
Newly Reported Cases.....	213	218
White.....	89	90
Nonwhite.....	124	128
Number of Readmissions.....	30	20
White.....	16	10
Nonwhite.....	14	10
Number of Tuberculosis Deaths	41	33
White.....	22	18
Nonwhite.....	19	15
Number of Patients Admitted to Tuberculosis Hospitals	238	210*
Number of Patients on Chemotherapy March 31, 1960.....	1,451	
Started in 1960.....	196	
Started Prior to 1960.....	1,255	

*1958 experience; 1959 not available.

Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Second Quarter, 1960 and 1957-1959

	APRIL - JUNE				JANUARY - JUNE	
	Number		Rate*		Rate*	
	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59
	All Races					
Marriages recorded.....	2,594	2,712	10.6	11.1	9.4	9.9
Births.....	5,207	5,739	21.2	23.4	22.5	24.1
Deaths, all causes.....	2,748	2,739	11.2	11.2	12.7	11.9
Deaths, under one year.....	184	204	35.3	35.5	35.8	34.6
under 28 days.....	134	157	25.7	27.4	24.4	25.8
28 days-11 months...	50	47	9.6	8.2	11.4	8.8
White						
Marriages recorded.....	1,743	1,849	10.4	10.9	8.7	9.4
Births.....	2,751	3,146	16.4	18.5	17.1	19.1
Deaths, all causes.....	1,936	1,956	11.6	11.5	13.0	12.3
Deaths, under one year.....	70	85	25.4	27.0	28.4	26.6
under 28 days.....	52	64	18.9	20.3	19.9	19.8
28 days-11 months...	18	21	6.5	6.7	8.5	6.8
Nonwhite						
Marriages recorded.....	851	863	10.9	11.5	11.0	10.9
Births.....	2,456	2,593	31.6	34.5	34.1	35.2
Deaths, all causes.....	812	783	10.4	10.4	11.7	11.0
Deaths, under one year.....	114	119	46.4	45.9	43.8	44.3
under 28 days.....	82	93	33.4	35.9	29.4	33.1
28 days-11 months...	32	26	13.0	10.0	14.5	11.2

*Infant mortality rates are per 1,000 live births. All other rates—marriage, birth and death—are on an annual basis per 1,000 population estimated as of July 1, 1959—total population 987,000, white, 674,000, nonwhite, 313,000.

Table II

Resident Deaths From Selected Causes
Second Quarter, 1960 and 1957-1959

Cause of Death	APRIL - JUNE				JANUARY - JUNE	
	Number		Rate Per 100,000*		Rate Per 100,000*	
	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59
All Causes.....	2,705	2,752	11.0	11.2	12.7	11.9
Tuberculosis (001-019).....	36	45	14.6	18.4	18.9	19.3
Syphilis (020-029).....	9	11	3.6	4.5	2.9	4.9
Cancer (140-205).....	456	461	185.8	188.2	194.2	189.0
Diabetes mellitus (260).....	52	63	21.2	25.7	24.2	26.3
Vascular lesions of the central nervous system (330-334)...	198	210	80.7	85.7	96.6	91.1
Diseases of the heart (410-443).....	1,110	1,132	452.3	462.0	518.7	508.1
Influenza and pneumonia (480-483, 490-493).....	74	87	30.2	35.5	58.9	44.9
Nephritis and nephrosis (590-594).....	17	26	6.9	10.6	8.6	10.0
Puerperal causes (640-652, (670-689).....	1	2	0.4	0.8	0.6	1.4
Congenital malformations (750-759).....	36	35	14.7	14.3	16.5	12.9
Certain diseases of early infancy (760-776).....	130	137	53.0	55.9	54.8	54.2
Suicides (963, 970-979).....	16	24	6.5	9.8	9.0	10.1
Homicides (964, 980-999).....	29	26	11.8	10.6	12.0	8.8
Accidents (800-802, 810-835, 840-962).....	114	124	46.5	50.6	38.3	47.6
Motor vehicle (810-835).....	37	41	15.1	16.7	13.9	15.2

*Rates shown for all causes are per 1,000 population.

CASES AND DEATHS FROM SELECTED CAUSES, AND INFANT DEATHS BY HEALTH DISTRICTS
SECOND QUARTER, 1960 AND 1957-1959 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Southeastern		Southern		Western		Druid		Northwestern	
	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59
Infant deaths	184	204	54	65	26	20	19	23	42	27	41	41	0	28
Tuberculosis Cases Deaths	223 36	269 45	64 7	77 13	35 5	32 7	19 5	24 5	47 8	36 6	58 8	73 10	0 0	26 3
Syphilis Cases Deaths	423 9	389 11	95 3	94 3	31 2	28 2	23 0	18 0.7	119 1	43 0.7	147 2	164 3	0 0	37 1
Typhoid Cases Deaths	0 0	0.3 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0.3 0	0 0	0 0
Diphtheria Cases Deaths	0 0	0.3 0.3	0 0	0 0	0 0	0.3 0.3	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Whooping Cases Deaths	9 0	28 0.3	4 0	13 0.3	2 0	3 0	0 0	2 0	2 0	1 0	1 0	4 0	0 0	5 0
Meningococcal Cases Deaths	3 1	2 1	0 0	0.3 0.3	1 1	0.7 0.3	0 0	0 0	1 0	0.3 0.3	1 0	0.3 0	0 0	0.3 0
Measles Cases Deaths	902 1	490 0.3	332 0	154 0	135 0	51 0	34 0	37 0.3	184 0	53 0	217 0	85 0	0 0	109 0
Acute polio- myelitis (paralytic) Cases Deaths	0 0	0.7 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0.7 0	0 0	0 0

All figures corrected for residence within Maryland.

*Totals include some intrastate transfers allocated to Baltimore City but not otherwise allocated to Health Districts.

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths and Tuberculosis Hospital Admissions
Second Quarter 1960 and 1959

	APRIL-JUNE		JANUARY-JUNE	
	Total		Total	
	1960	1959	1960	1959
Newly Reported Cases.....	215	249	428	467
White.....	75	110	165	200
Nonwhite.....	140	139	263	267
Reported After Death.....	10	10	22	20
Number of Readmissions.....	21	24	51	44
White.....	12	15	28	25
Nonwhite.....	9	9	23	19
Number of Tuberculosis Deaths.....	40	35	81	68
White.....	25	17	47	35
Nonwhite.....	15	18	34	33
Number of Patients Admitted to Tuberculosis Hospitals.....	187	265*	425	475*
Number of Patients on Chemotherapy June 30, 1960.....	1,582			
Started in 1960.....	448			
Started Prior to 1960.....	1,134			

*1958 Figure

Implications of the Changing Character of the Baltimore City Medical Care Program Population*

In many public health programs, changes in the characteristics of the population served place new demands on the purpose, administration and financing of the program as originally designed. This report briefly describes the nature and implications of some changes that have occurred in the population served by the Medical Care Program of the Baltimore City Health Department since its inauguration in 1948.

The Medical Care Program

The Baltimore City Medical Care Program has, since 1948, provided extensive medical services to indigent residents of Baltimore City. The services can be classified into the following five general groups:

- 1) Home and office care provided by a private physician of the client's choice.
- 2) Specialist consultation, laboratory, X-ray and outpatient services provided by seven hospitals under contract with the Commissioner of Health of Baltimore City.
- 3) Drugs prescribed by a medical doctor and supplied by any registered pharmacist in the State of Maryland or surrounding states.
- 4) Dental care and dentures supplied by a special Health Department Dental Clinic and by private dentists of the client's own choosing.
- 5) Eyeglasses provided by ophthalmologists and optometrists practicing in Baltimore City.

When any person is accepted for assistance by the Baltimore City Department of Public Welfare, that agency notifies the Medical Care Section of

* By Bertram W. Haines, Sc.D., Director, Bureau of Medical Care Research, Medical Care Section, Baltimore City Health Department.

the Baltimore City Health Department of this action. The Medical Care Section then assigns the person to one of the seven hospitals conducting special medical care clinics under contractual agreement with the Commissioner of Health of Baltimore City. The assignment is made on the basis of existing hospital records if known, client's preference if known and the location of the client's residence. Notification of the assignment and an appointment to the medical care clinic are mailed to the client. At the clinic, the client registers with the program. Registration includes choosing a practicing private physician to provide needed home and office care.

Nearly all new clients are given an initial physical examination at the medical care clinic. Reports of this examination are sent to the chosen physician and to the Department of Public Welfare.

Following registration, the client may call upon his chosen physician for any needed medical care. If the physician wishes specialist consultation, laboratory tests, or specialized treatment which he is not equipped to provide in his office, he may obtain these services from the client's assigned hospital through the medical care clinic. If the physician wishes to prescribe drugs for his patient, he may do so on a special Medical Care prescription blank. These prescriptions may be filled by any registered pharmacist. If the physician determines that the patient needs dental work or eyeglasses, they may be obtained through the medical care clinic.

When, for any reason, a client's name is removed from the welfare rolls the Medical Care Section is notified. Following this notification, the client is removed from Medical Care Program rolls within three to nine months, the time depending on the category in which the client's public assistance grant was classified by the Welfare Department.

Vendor Payments

Each hospital is paid \$11.00 per assigned person per year. Thus, a hospital which maintains a monthly average of 5,000 assigned clients on its rolls for one year would be paid \$55,000.00 by the City of Baltimore. This money is used by the hospitals to maintain and staff the medical care clinic and to pay for other outpatient department services which may be provided to the medical care clients.

The City of Baltimore pays each private physician participating in the program at the rate of \$7.00 per client per year. Thus, a physician who maintains an average of 70 clients on his list will be paid \$490.00 in one year.

Each pharmacist who fills a prescription completes a special portion of the prescription blank which constitutes his bill. This includes the cost of the ingredients and a service fee which is based on an accepted schedule.

Dentists and opticians are also paid on a fee-for-service basis. Each must bill the program for any authorized service he may render.

Influence of Morbidity and Population Size on Costs

The true costs of a medical care program using both capitation and fee-for-service payments depend mainly on two variables. One of these is the size of the population served and the other is the level of morbidity in that population. The cost to the taxpayer is influenced by the size of the population served irrespective of whether payment is made on a capitation basis or as a fee-for-service. The level of morbidity, however, only influences the taxpayer's costs through those services paid for on a fee-for-service basis. With a capitation basis, the influence of the morbidity level on cost will be directed toward the vendor of services. Thus in the Baltimore City Medical Care Program an increase in the level of morbidity will increase the taxpayer's costs of maintaining the drug program but the increase in the costs of maintaining medical care clinics will be borne by the hospitals.

Changes in the Baltimore City Medical Care Program Population, 1949-1959

The level of morbidity in a population cannot always be measured directly. There are other characteristics of the population which may be more easily measured and which are closely associated with morbidity.

During the past ten years, some characteristics of the population covered by the Baltimore City Medical Care Program have undergone significant changes; they are not all now as they were when the program was designed.

Changes in some characteristics, such as race and sex, have little direct influence on the costs of maintaining the program. The changes in the distribution of medical care clients among the several welfare categories, however, are distinctly related to some cost changes. In 1949, nearly one quarter of the medical care population were receiving Old Age Assistance (Table I). At the present time only 10 per cent of the population are in this category. The proportion of persons receiving Aid to Dependent Children has increased during the last 10 years from 59 per cent to 69 per cent. Sixteen per cent of the 1949 medical care population were receiving General Public Assistance while today only 5 per cent of our population are in this category. Since 1949, the program has added to its rolls persons receiving Aid to the Permanently and Totally Disabled and children receiving Foster Care.

A more direct appraisal of change can be made from comparisons of age composition (Table II). The earliest record of the age distribution of the medical care population is presented in the annual report of the Baltimore City Health Department for 1949. In that year, one-third of total medical care population were under 15; one-third were between the ages of 15 and 65; and one-third were over 65. In contrast, at the present time, more than half (53 per cent) of the medical care clients are less than 15 years old and only about 10 per cent are more than 65 years old. However, as in 1949, the remaining third of the

total population are between the ages of 15 and 65. It should be pointed out that the decrease in the proportion of old persons is in direct opposition to the general trend of population growth since, at the present time, the medical care rolls are 60 per cent higher than there were at the end of 1949. During this 10 year period, the youngest segment of the medical care population (those under 15) has increased by 125 per cent whereas the old portion (those over 65) has decreased by 45 per cent.

Implication of Changes

These changes in the population are important because of the impact which they have on the services provided under this program. Utilization data indicate that the cost of providing these services is not influenced by either race or sex. There is, however, a pronounced difference in utilization with age.

In general, a young population requires fewer medical services than an older one. Since the medical care population is now much younger than it was when the program started, it is reasonable to question the necessity or desirability for maintaining the present policy with respect to some of the services which this program requires. One such service is the initial physical examination. Should this service be maintained or eliminated? If we eliminate it for the young, should we have, instead, more periodic examinations for the aged?

The large reduction in the number of old people on medical care, coupled with the known increase in the number of old persons in the general population, brings up the question of why these old persons are no longer on the welfare rolls. Is it because they are now receiving Social Security benefits? If these benefits permit them to keep off welfare rolls, are they also sufficient to enable them to pay for the increased number of medical services which these people need? Is the decrease in the old age portion of the medical care program an indication that the Health Department should become actively engaged in providing medical care to

the medically indigent persons who would be indigent if it were not for their small old age survivor's benefits?

But now consider the other end of the age scale, the young. The increase of 125 per cent in the number of children under 15 on medical care rolls represents nearly 11,000 persons. These thousands of children require many special medical services both corrective and preventive in nature. Eyeglasses are one such service. At the present time, the Baltimore City Medical Care Program is very limited as to the number of eyeglasses which can be provided, and there are long waiting lists of persons who need them.

Children also need many dental services. Figures from the Eastern Health District Dental Clinic indicate that nearly two-thirds of the services they provide are for children. These young persons receive nearly three-fourths of all the fillings provided under this program.

Conclusion

In this statement are outlined a few of the medical service areas affected by the changing character of the Baltimore City Medical Care Program population. The fact that the number of old persons now served by the program is decreasing certainly does not mean that the need for providing medical care to these aged persons is similarly decreasing. A medical care program should be sensitive to changes which bring about increased or different medical care needs and should take the steps required to meet these new needs as they arise.

Table I

Distribution of Baltimore City Medical Care Program
Population by Welfare Category of Assistance 1949 and 1959

Category	Number of Persons		Per Cent	
	1949	1959	1949	1959
Old Age Assistance	5,428	3,737	23.6	10.1
Aid to Dependent Children	13,501	25,678	58.7	69.4
Aid to the Blind	276	259	1.2	0.7
General Public Assistance	3,657	1,924	15.9	5.2
Aid to Permanently and Totally Disabled	138	3,700	0.6	10.0
Foster Care		1,702		4.6
Total	23,000	37,000	100.0	100.0

Table II

Age Distribution of the Baltimore City
Medical Care Program Population 1949 and 1959

Age	Number of Persons		Per Cent	
	1949	1959	1949	1959
0 - 14	8,640	19,499	37.5	52.7
15 - 24	1,740	3,256	7.6	8.8
25 - 44	2,800	5,476	12.2	14.8
45 - 64	2,560	4,847	11.1	13.1
65 -	7,260	3,922	31.6	10.6
Total	23,000	37,000	100.0	100.0

**BALTIMORE CITY HEALTH DEPARTMENT
RESEARCH AND PLANNING SECTION**

QUARTERLY

STATISTICAL

REPORT

MARRIAGES

BIRTHS

MORTALITY

MORBIDITY

*Maryland Room
University of Maryland Library
College Park, Md.*

THIRD QUARTER 1960

DECEMBER 20, 1960 VOL. 12 NO. 3

BALTIMORE CITY HEALTH DEPARTMENT

HUNTINGTON WILLIAMS, M.D.
Commissioner

RESEARCH AND PLANNING SECTION

MATTHEW TAYBACK, S.C.D.
Assistant Commissioner of Health

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation."

Quetelet

Inquiries concerning the materials published, should be addressed to Mr. Todd M. Frazier, Director, Bureau of Biostatistics, Baltimore City Health Department, Baltimore 3, Maryland.

Table of Contents

	Page
A Summary of Vital Events	1 - 3
B Annual Rates by Month for Births and Selected Causes of Death	4
C Morbidity Rates by Month	5
D Tables of Vital Events	6 - 9
I Marriages, Births, Deaths by Race	6
II Deaths From Selected Causes	7
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	8
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths and Tuberculosis Hospital Admissions	9
E Births, Deaths and Cases by Health District, 1959	10 - 24
Eastern Health District	10 - 12
Western Health District	13 - 15
Druid Health District	16 - 18
Southeastern Health District	19 - 21
Southern Health District	22 - 24
F Perinatal Wastage Following the 1957 Outbreak of Asian Influenza in Baltimore City	25 - 29

January-September, 1960

Marriages and Births

The number of marriages in Baltimore City continued to decline. During the first nine months of 1960, 7,167 marriages were recorded, a decrease of 129 from the 1959 figure and a decrease of 394 from the previous three year average for the same months.

Resident births numbered 17,442 for the period January-September 1960, a decrease of 421 from the number born in the same period last year. A slightly smaller decrease of 324 births from last year is noted for all births in Baltimore City, that is, resident and non resident. For the last three years there has been a steady decrease in total deliveries in Baltimore City.

Mortality

The annual death rate from all causes during the months January-September was 12.6 deaths per 1000 population. This is an increase from the average rate of 12.1 deaths for the same months in the preceding three years. The causes of death that contributed to this increase included: cancer, vascular lesions of the central nervous system, diseases of the heart, influenza and pneumonia, congenital malformations and homicides.

Infant and Maternal Mortality

Baltimore's infant mortality experience has been at a high level for the past three years. The record for the third quarter of 1960 shows a welcome decrease in this rate and also a continuation of a decrease in the neonatal death rate.

Year (January-September)	Death Rate Per 1000 Live Births	
	Infant	Neonatal
1956	29.0	21.1
1957	34.2	26.7
1958	34.5	26.7
1959	34.5	25.4
1960	33.4	23.4

This trend was observed for both white and nonwhite births.

Morbidity

Morbidity rates due to all illnesses and respiratory illnesses as reported by respondents in the 100 randomly selected families interviewed in the continuing Baltimore Health Survey show a drop during the third quarter of the year compared to the preceding quarters.

During the months July, August, and September, 44 cases of paralytic poliomyelitis were reported in Baltimore City. This is the largest number of poliomyelitis cases in the third quarter of any year since the Salk vaccine became available.

Thirty-seven out of the 44 paralytic poliomyelitis cases were among children under 10 years of age. By using poliomyelitis vaccination information from the Baltimore Health Survey along with the vaccination status of the cases among these young children, attack rates by vaccination status were developed.

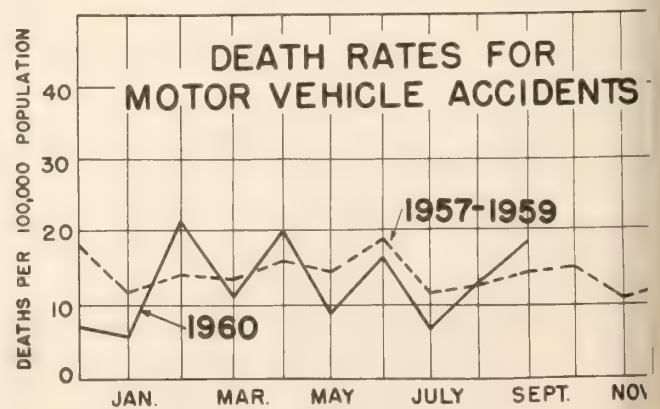
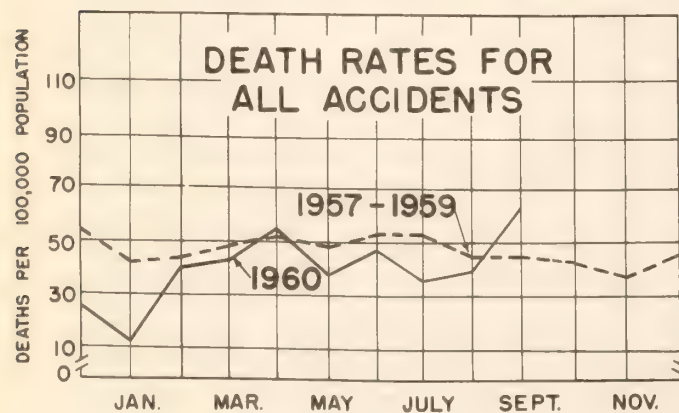
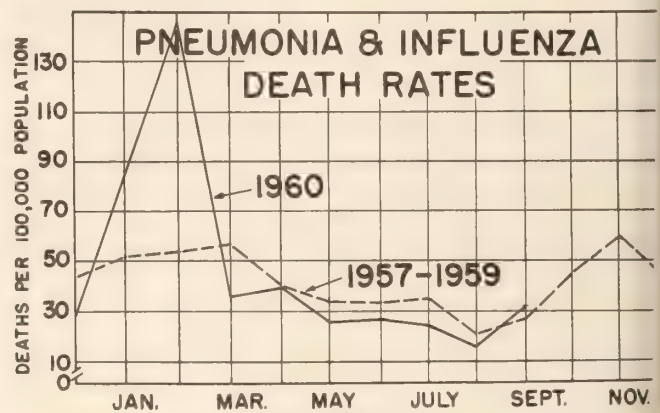
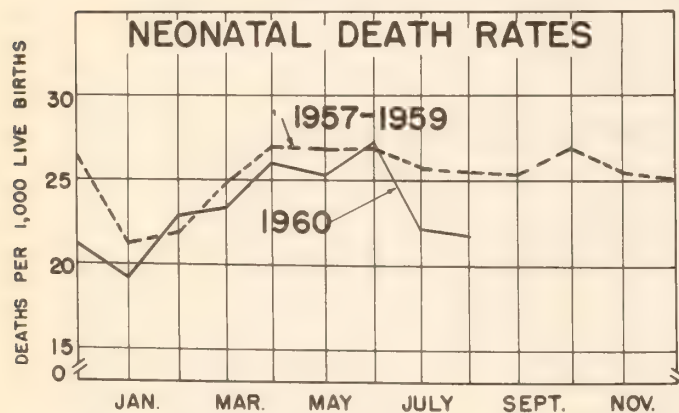
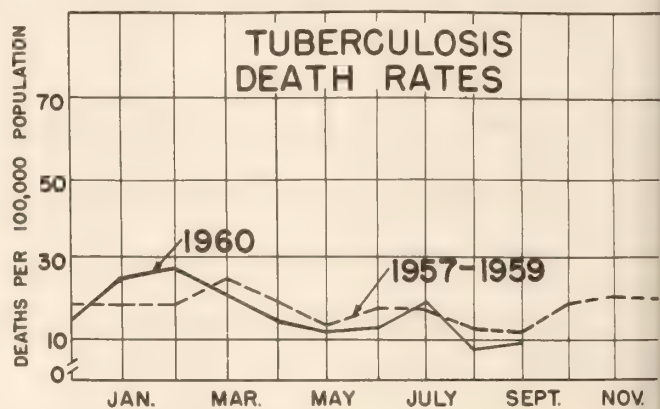
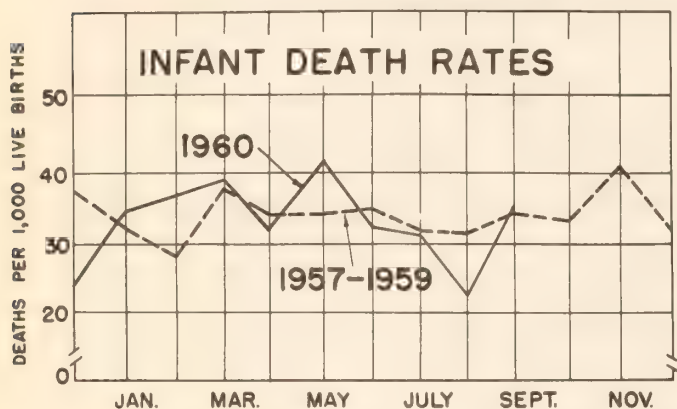
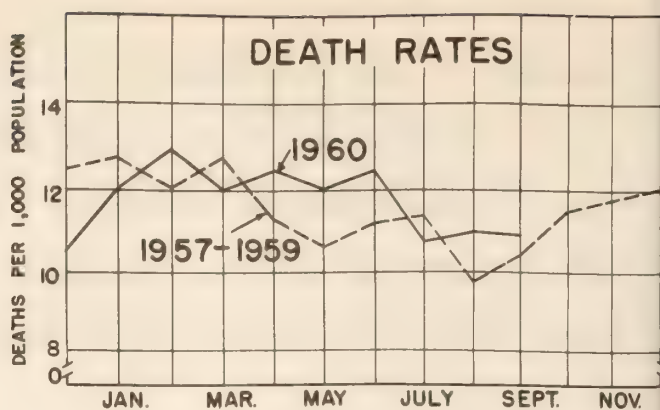
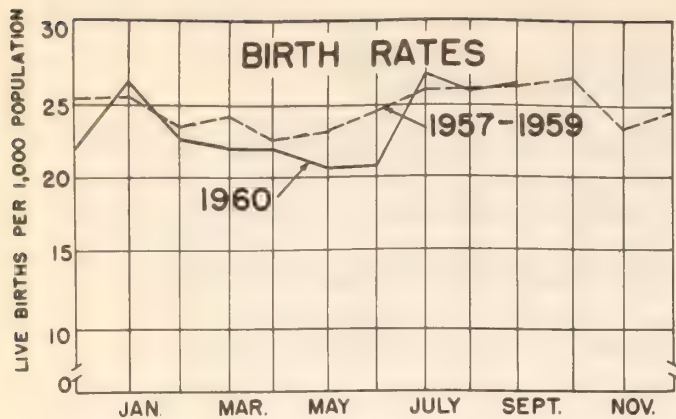
Poliomyelitis Attack Rates Among Children Under 10 by Vaccination Status, Baltimore City January-September, 1960

	Vaccination Status				
	Total	No Vaccine	One or Two Shots	Three or More Shots	Unknown
Number of Cases	37	16	7	10	4
Vaccination status of all Baltimore City children under 10 (per cent)*	100.0	16.6	17.1	66.3	
Estimated number of children by vaccination status	209,192	34,640	35,718	138,834	
Estimated attack rates per 100,000 children	17.7	46.2	19.6	7.2	

*Based on the Baltimore Health Survey interviews during the period January-September involving 584 children under age 10. The Baltimore Health Survey is described in a Special Statistical Report of the Research and Planning Section of the Baltimore City Health Department, released May 16, 1960.

The reduction in attack rate for the children with three or more shots compared to the "no vaccine" group is 84 per cent. Unfortunately, many parents neglected to have their children protected against this disease.

During the first nine months of 1960, there were 632 newly reported cases of tuberculosis, a decrease of 3 per cent from the comparable figure in 1959. Reactivated cases in this period showed a decline of 10 cases from last year. Tuberculosis deaths, on the other hand, showed a slight increase from the 1959 level.



BALTIMORE CITY HEALTH DEPARTMENT

1960 BALTIMORE HEALTH SURVEY

MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS, (275 - 325 PERSONS) BY MONTHS

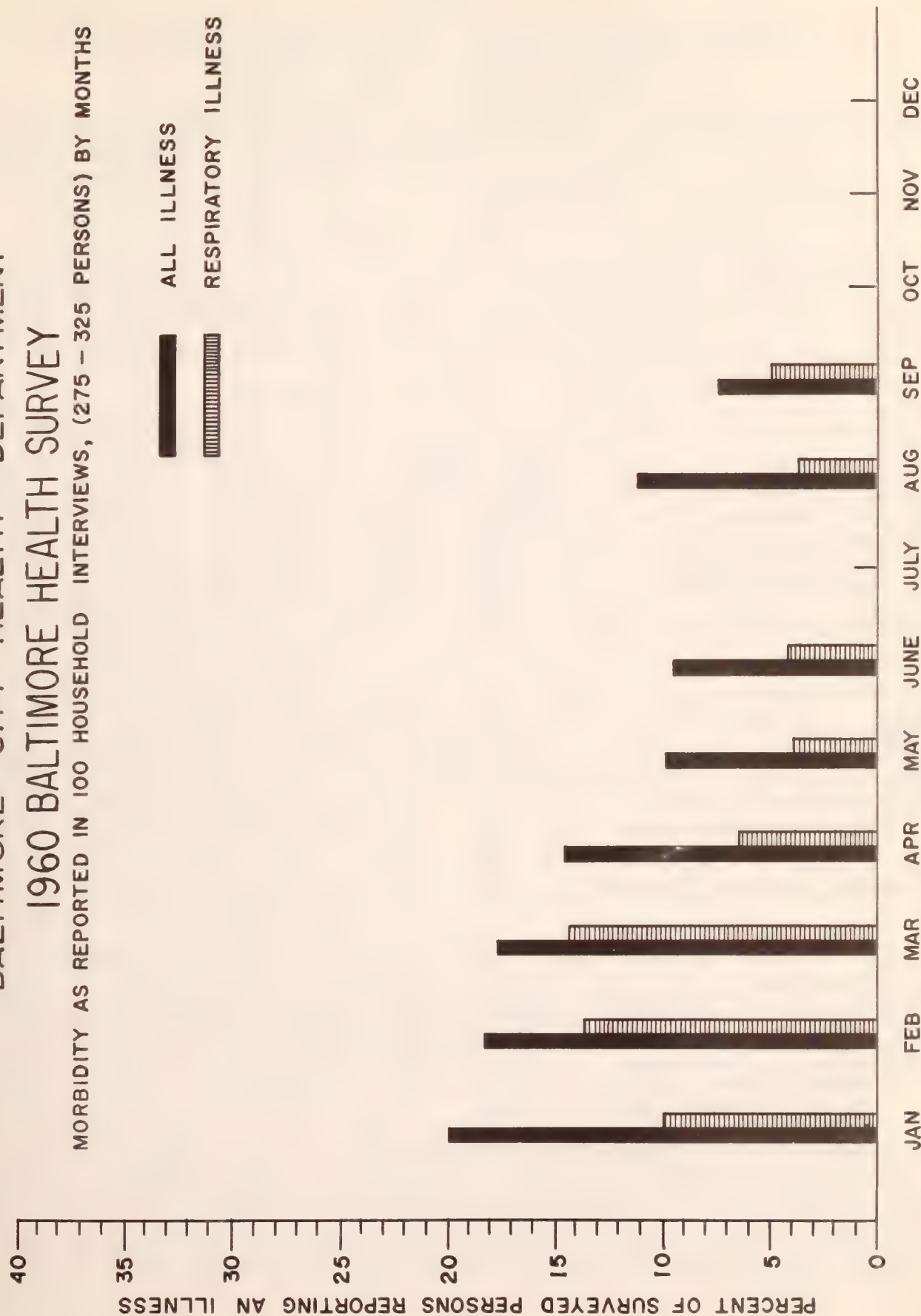


Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Third Quarter, 1960 and 1957-1959

Vital Event	JULY - SEPTEMBER				JANUARY-SEPTEMBER	
	Number		Rate*		Rate*	
	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59
All Races						
Marriages Recorded.....	2,547	2,753	11.1	11.8	10.4	10.9
Births.....	6,386	6,463	27.9	27.6	25.3	26.2
Deaths, all causes.....	2,527	2,599	11.0	11.1	12.6	12.1
Deaths, under one year.....	187	217	29.3	33.6	33.4	34.2
under 28 days.....	139	174	21.7	27.0	23.4	26.2
28 days-11 months....	48	43	7.6	6.6	10.0	8.0
White						
Marriages Recorded.....	1,588	1,763	10.6	11.2	10.0	10.6
Births.....	3,235	3,516	21.7	22.4	20.0	21.4
Deaths, all causes.....	1,762	1,837	11.8	11.7	13.6	12.8
Deaths, under one year.....	72	86	22.3	24.4	26.2	25.9
under 28 days.....	52	69	16.1	19.6	18.5	19.7
28 days-11 months	20	17	6.2	4.8	7.7	6.2
Nonwhite						
Marriages Recorded.....	959	990	12.0	12.9	11.1	11.6
Births.....	3,151	2,947	39.3	38.5	35.0	36.1
Deaths, all causes.....	765	762	9.5	10.0	10.7	10.6
Deaths, under one year.....	115	131	36.5	44.4	41.1	44.3
under 28 days.....	87	105	27.6	35.6	28.7	34.0
28 days-11 months....	28	26	8.9	8.8	12.4	10.3

* Infant mortality rates are per 1000 live births. All other rates--marriage, birth and death--are on an annual basis per 1000 population estimated as of July 1, 1960 total population 922,000; white, 599,300; nonwhite 322,700. Population for period 1957-1959 was taken as the mid year 1958 population as adjusted from the 1960 provisional Census. Total population 928,000; white, 624,000; nonwhite, 304,000.

Table II

Resident Deaths From Selected Causes
Third Quarter, 1960 and 1957-1959

Cause of Death	JULY - SEPTEMBER				JANUARY - SEPTEMBER	
	Number		Rate Per 100,000*		Rate Per 100,000*	
	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59
All Causes	2,527	2,621	11.0	11.2	12.6	12.1
tuberculosis (001-019).....	28	38	12.2	16.2	17.5	19.0
syphilis (020-029).....	3	12	1.3	5.1	2.5	5.0
cancer (140-205).....	473	454	206.3	194.1	206.6	198.1
diabetes mellitus (260).....	54	52	23.6	22.2	25.1	26.1
vascular lesions of the central nervous system (330-334).....	197	198	85.9	85.0	97.2	92.6
diseases of the heart (410-443)....	993	1,055	433.2	451.0	512.7	508.7
influenza and pneumonia (480-483, 490-493).....	55	68	24.0	29.1	49.8	41.3
nephritis and nephrosis (590-594)..	17	23	7.4	9.8	8.5	10.2
verberal causes (640-652, 670-689).....	3	2	1.3	0.9	0.9	1.3
ongenital malformations (750-759)..	47	38	20.5	16.2	18.5	14.4
ertain diseases of early infancy (760-776).....	126	152	55.0	65.0	57.2	59.9
icides (963, 970-979).....	17	23	7.4	10.0	8.8	10.4
omicides (964, 980-999).....	34	28	14.8	12.0	13.5	10.2
ccidents (800-802, 810-835, 840-962).....	107	119	46.7	50.9	42.7	50.6
otor vehicles (810-835).....	29	37	12.7	15.8	14.1	16.0

*Rates shown for all causes are per 1000 population

Table III
CASES AND DEATHS FROM SELECTED CAUSES, AND INFANT DEATHS BY HEALTH DISTRICTS
THIRD QUARTER, 1960 AND 1957-1959 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Southeastern		Southern		Western		Druid		Northwestern	
	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59
Infant deaths	187	218	54	63	31	21	19	23	39	30	39	52	0	29
Tuberculosis all forms	Cases 209 Deaths 28	225 38	59 10	67 9	21 3	30 9	27 2	18 4	52 5	29 6	49 5	57 7	0 0	24 3
Typhoid fever	Cases 2 Deaths 0	2 0	1 0	0.3 0	0 0	0 0	1 0	0.3 0	0 0	0.7 0	0 0	0.3 0	0 0	0 0
Diphtheria	Cases 0 Deaths 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Whooping cough	Cases 31 Deaths 0	62 0	10 0	27 0	2 0	8 0	1 0	3 0	14 0	8 0	4 0	11 0	0 0	5 0
Meningo-coccal infections	Cases 1 Deaths 0	3 0.7	0 0	0.7 0.3	0 0	0.3 0	0 0	0.3 0	1 0	0.3 0	0 0	1 0.3	0 0	0 0
Measles	Cases 106 Deaths 0	172 0	20 0	38 0	25 0	15 0	10 0	20 0	14 0	16 0	37 0	48 0	0 0	35 0
Acute polio-myelitis (paralytic)	Cases 44 Deaths 0	5 0.3	13 0	1 0.3	7 0	0.3 0	3 0	1 0	19 0	1 0	2 0	1 0	0 0	0.7 0
Syphilis	Cases 418 Deaths 3	354 12	98 0	90 2	22 1	23 2	15 0	16 0.7	115 2	37 2	155 0	153 4	0 0	30 0.7

*All figures corrected for residence within Maryland.
Totals include some transfers allocated to Baltimore City but not otherwise allocated to health districts.

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths and Tuberculosis Hospital Admissions
Third Quarter, 1960 and 1959

	JULY-SEPTEMBER		JANUARY-SEPTEMBER	
	Total		Total	
	1960	1959	1960	1959
Newly Reported Cases.....	201	181	632	652
White.....	78	98	243	298
Nonwhite.....	123	83	389	354
Reported After Death.....	8	9	30	29
Number of Readmissions.....	17	34	58	78
White.....	8	22	36	47
Nonwhite.....	9	12	22	31
Number of Tuberculosis Deaths.....	28	32	106	103
White.....	11	21	58	56
Nonwhite.....	17	11	48	47
Number of Patients Admitted to Tuberculosis Hospitals	201	194*	626	669*
Number of Patients on Chemotherapy September 30, 1960.....	1,595			
Started in 1960.....	534			
Started prior to 1960.....	1,061			

*1958 Figure

Table 1

Resident Births
Eastern Health District, 1959

Place of Delivery and Attendant	Total	White	Nonwhite
All Births	8,079	4,502	3,577
Hospital	7,953	4,478	3,475
Home	126	24	102
Private Physician	93	19	74
Midwife	17	3	14
Other	16	2	14

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Eastern Health District, 1959

Cause of Death	Total	White	Nonwhite
All Causes	3,736	2,873	863
Tuberculosis, all forms (001-019).....	47	26	21
Respiratory tuberculosis (001-008).....	43	23	20
Syphilis (020-029).....	11	5	6
Dysentery (145-048).....	3	2	1
Meningococcal infections (057).....	1	1	-
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	7	5	2
Encephalitis (082-083).....	1	1	-
Other infective and parasitic diseases (110-138).....	1	-	1
Malignant neoplasms (140-205).....	645	546	99
Lymphatic and hematopoietic (200-205).....	60	53	7
Benign and unspecified neoplasms (210-239)...	9	7	2
Diabetes (260).....	61	49	12
Anemias (290-293).....	5	4	1
Other diseases of the blood and blood- forming organs (294-299).....	3	2	1
Vascular lesions of the central nervous system (330-334).....	309	222	87
Rheumatic fever (400-402).....	3	-	3

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Eastern Health District, 1959

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	1,588	1,372	216
Chronic rheumatic heart disease (410-416).....	26	23	3
Arteriosclerotic and degenerative heart disease (420-422).....	1,244	1,123	121
Other diseases of the heart (430-434).....	40	34	6
Hypertensive heart disease (440-443).....	278	192	86
Other hypertensive diseases (444-447).....	17	10	7
Arteriosclerosis (450).....	70	35	35
Other diseases of the circulatory system (450-458).....	14	10	4
Nephritis and nephrosis (590-594).....	28	20	8
Influenza and pneumonia (480-483, 490-493).....	134	90	44
Pneumonia (490-493).....	134	90	44
Bronchitis (500-502).....	11	11	-
Ulcer of the stomach and duodenum (540-541).....	25	21	4
Appendicitis (550-553).....	2	2	-
Intestinal obstruction and hernia (560-570).....	35	31	4
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	17	10	7
Cirrhosis of the liver (581).....	62	49	13
Hyperplasia of prostate (610).....	4	4	-
Periperal causes (640-689).....	3	-	3
Congenital malformations (750-759).....	40	26	14
Certain diseases of early infancy (760-776).....	181	61	120
Pneumonia of newborn (763).....	10	7	3
Diarrhea of newborn (764).....	1	-	1
Idiocy, ill-defined and unknown conditions (780-795).....	10	7	3
All other diseases.....	199	126	73
Accidents total (800-962, 965).....	136	90	46
Motor vehicle accidents (810-835).....	43	27	16
All other accidents.....	93	63	30
Homicides (963, 970-979).....	27	23	4
Infanticides (964, 980-985).....	27	5	22

Table 3

Communicable Diseases Reported
Eastern Health District, 1949

Disease	Total	White	Nonwhite
Total	3,832	951	2,881
Chickenpox	240	108	132
Diphtheria .....	..	-	-
German measles	60	47	13
Gonococcal infections	1,533	74	1,859
Measles	370	274	96
Meningococcal infections	2	2	-
Mumps	259	135	124
Poliomyelitis, paralytic cases .	1	-	1
Scarlet fever	76	53	23
Syphilis	455	67	388
Tuberculosis, all forms	233	105	128
Typhoid fever	1	1	-
Whooping cough	32	20	12
All others	170	65	105

Table 1
Resident Births
Western Health District, 1959

Place of Delivery and Attendant	Total	White	Nonwhite
All Births	3,262	1,862	1,400
Hospital	3,191	1,835	1,356
Home	71	27	44
Private Physician	57	22	35
Midwife	12	5	7
Other	2	-	2

Table 2
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Western Health District, 1959

Cause of Death	Total	White	Nonwhite
All Causes	1,755	1,098	657
tuberculosis, all forms (001-019).....	17	8	9
Respiratory tuberculosis (001-008).....	16	8	8
syphilis (020-029).....	3	1	2
meningococcal infections (057).....	2	1	1
other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	3	2	1
encephalitis (082-083).....	2	-	2
malignant neoplasms (140-205).....	266	175	91
Lymphatic and hematopoietic (200-205).....	21	13	8
benign and unspecified neoplasms (210-239)....	10	8	2
diabetes (260).....	36	27	9
anemias (290-293).....	5	1	4
other diseases of the blood and blood- forming organs (294-299).....	1	-	1
vascular lesions of the central nervous system (330-334).....	150	84	66
pneumatic fever (400-402).....	1	-	1
diseases of the heart (410-443).....	729	529	200
Chronic rheumatic heart disease (410-416)...	16	13	3

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Western Health District, 1959

Cause of Death	Total	White	Nonwhite
Arteriosclerotic and degenerative heart disease (420-422).....	531	427	104
Other diseases of the heart (430-434).....	13	5	8
Hypertensive heart disease (440-443).....	169	84	85
Other hypertensive diseases (444-447).....	9	5	4
Arteriosclerosis (450).....	23	13	15
Other diseases of the circulatory system (451-468).....	14	8	6
Nephritis and nephrosis (590-594).....	20	6	14
Influenza and pneumonia (480-483, 490-493).. Pneumonia (490-493).....	56 56	25 25	31 31
Bronchitis (500-502).....	5	4	1
Ulcer of the stomach and duodenum (540-541).. Intestinal obstruction and hernia (560-570).. Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	14 10 10	8 6 3	6 4 7
Cirrhosis of the liver (581).....	40	27	13
Congenital malformations (750-759).....	13	7	8
Certain diseases of early infancy (760-776).. Pneumonia of newborn (763)..... Diarrhea of newborn (764).....	104 11 1	36 2 -	68 9 1
Senility, ill-defined and unknown conditions (780-791).....	8	7	1
All other diseases.....	94	50	44
Accidents, total (800-962, 965).....	75	37	38
Motor vehicle accidents (810-835).....	23	11	12
All other accidents.....	52	26	26
Suicides (963, 970-979).....	13	13	-
Homicides (964, 980-985).....	15	7	8

Table 3

Communicable Diseases Reported
Western Health District, 1959

Disease	Total	White	Nonwhite
Total	1,332	373	959
Chickenpox	70	40	30
Diphtheria	-	-	-
German measles	14	7	7
Gonococcal infections	650	57	593
Measles	129	74	55
Meningococcal infections	4	3	1
Mumps	85	39	46
Poliomyelitis, paralytic cases ..	2	2	-
Scarlet fever	14	11	3
Syphilis	166	26	140
Tuberculosis, all forms	108	51	57
Typhoid fever	1	1	-
Whooping cough	12	9	3
All others	77	53	24

Table 1
Resident Births
Druid Health District, 1959

Place of Delivery and Attendant	Total	White	Nonwhite
All Births	3,808	266	3,682
Hospital	3,789	254	3,535
Home	149	2	147
Private Physician	101	2	99
Midwife	33	-	33
Other	15	-	15

Table 2
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Druid Health District, 1959

Cause of Death	Total	White	Nonwhite
All Causes	1,435	293	1,142
Tuberculosis, all forms (001-019).....	26	4	22
Respiratory tuberculosis (001-008).....	26	4	22
Syphilis (020-029).....	15	-	15
Meningococcal infections (037).....	1	-	1
Other virus diseases (086-096).....	1	-	1
Other infective and parasitic diseases (110-138).....	1	-	1
Malignant neoplasms (140-205).....	214	36	178
Lymphatic and hematopoietic (200-205).....	16	6	10
Benign and unspecified neoplasms (210-239)....	4	1	3
Diabetes (260).....	27	4	23
Anemias (290-293).....	1	-	1
Vascular lesions of the central nervous system (330-334).....	113	15	97
Rheumatic fever (400-402).....	2	-	2

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
 Druid Health District, 1959

Cause of Death	Total	White	Nonwhite
seases of the heart (410-443).....	504	127	377
Chronic rheumatic heart disease (410-416)....	14	1	13
Arteriosclerotic and degenerative heart disease (420-422).....	333	108	225
Other diseases of the heart (430-434).....	12	3	9
Hypertensive heart disease (440-443).....	145	15	130
her hypertensive diseases (444-447).....	9	1	8
teriosclerosis (450).....	6	3	3
her diseases of the circulatory system (451-468).....	28	18	10
phritis and nephrosis (590-594).....	19	1	18
fluenza and pneumonia (480-483, 490-493).....	70	12	58
Pneumonia (490-493).....	70	12	58
onchitis (500-502).....	5	3	2
cer of the stomach and duodenum (540-541)....	10	1	9
pendicitis (550-553).....	2	-	2
testinal obstruction and hernia (560-570)....	6	-	6
stritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	13	3	10
rrhosis of the liver (581).....	27	13	14
perplasia of prostate (610).....	5	1	4
erperal causes (640-689).....	1	-	1
ngenital malformations (750-759).....	23	3	20
rtain diseases of early infancy (760-776)....	86	8	78
Pneumonia of newborn (763).....	5	-	5
Diarrhea of newborn (764).....	1	-	1
nility, ill-defined and unknown conditions (780-795).....	8	2	6
l other diseases.....	101	12	89
idents, total (800-962, 965).....	73	21	52
Motor vehicle accidents (810-835).....	18	6	12
All other accidents.....	55	15	40
icides (963, 970-979).....	9	3	6
micides (964, 980-985).....	25	-	25

Table 3

Communicable Diseases Reported
Druid Health District, 1959

Disease	Total	White	Nonwhite
Total	4,297	183	4,114
Chickenpox	147	7	140
Diphtheria	-	-	-
German measles	12	-	13
Gonococcal infections	2,842	87	2,837
Measles	166	17	149
Meningococcal infections	2	-	2
Mumps	77	4	73
Poliomyelitis, paralytic cases ..	3	-	3
Scarlet fever	16	2	14
Syphilis	613	29	584
Tuberculosis, all forms	212	24	188
Typhoid fever	-	-	-
Whooping cough	21	7	14
All others	103	8	97

Table 1
Resident Births
Southeastern Health District, 1959

Place of Delivery and Attendant	Total	White	Nonwhite
All Births	2,634	2,237	397
Hospital	2,598	2,216	382
Home	36	21	15
Private Physician	21	14	7
Midwife	12	6	6
Other	3	1	2

Table 2
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southeastern Health District, 1959

Cause of Death	Total	White	Nonwhite
All Causes	1,374	1,230	144
Tuberculosis, all forms (001-019).....	27	20	7
Respiratory tuberculosis (001-008).....	26	20	6
Syphilis (020-029).....	3	2	1
Meningococcal infections (057).....	1	1	-
Encephalitis (082-083).....	1	1	-
Malignant neoplasms (140-205).....	229	217	12
Lymphatic and hematopoietic (200-205).....	19	19	-
Benign and unspecified neoplasms (210-239)....	2	1	1
Diabetes (260).....	38	36	2
Anemias (290-293).....	2	2	-
Other diseases of the blood and blood- forming organs (294-299).....	1	1	-
Vascular lesions of the central nervous system (330-334).....	96	88	8
Rheumatic fever (400-402).....	1	1	-

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southeastern Health District, 1959

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	576	530	46
Chronic rheumatic heart disease (410-416)...	14	13	1
Arteriosclerotic and degenerative heart disease (420-422).....	445	417	28
Other diseases of the heart (430-434).....	10	8	2
Hypertensive heart disease (440-443).....	106	92	14
Other hypertensive diseases (444-447).....	3	3	2
Arteriosclerosis (450).....	34	17	17
Other diseases of the circulatory system (451-468).....	5	3	2
Nephritis and nephrosis (590-594).....	6	6	-
Influenza and pneumonia (480-483, 490-493)....	61	54	7
Pneumonia (490-493).....	61	54	7
Bronchitis (500-502).....	3	3	-
Ulcer of the stomach and duodenum (540-541)...	10	10	-
Intestinal obstruction and hernia (560-570)...	8	7	1
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	8	7	1
Cirrhosis of the liver (581).....	38	35	3
Hyperplasia of prostate (610).....	3	3	-
Puerperal causes (640-689).....	1	1	-
Congenital malformations (750-759).....	15	13	2
Certain diseases of early infancy (760-776)...	46	33	13
Pneumonia of newborn (763).....	2	1	1
Senility, ill-defined and unknown conditions (780-795).....	3	2	1
All other diseases.....	77	66	11
Accidents, total (800-962, 965).....	53	49	4
Motor vehicle accidents (810-835).....	14	13	1
All other accidents.....	39	36	3
Suicides (963, 970-979).....	14	13	1
Homicides (964, 980-985).....	7	5	2

Table 3

Communicable Diseases Reported
Southeastern Health District, 1959

Disease	Total	White	Nonwhite
Total	962	636	326
Chickenpox	58	39	19
Diphtheria	-	-	-
German measles	25	25	-
Gonococcal infections	324	126	198
Measles	105	100	5
Meningococcal infections	1	1	-
Mumps	70	57	13
Poliomyelitis, paralytic cases ..	1	1	-
Scarlet fever	28	26	2
Syphilis	127	67	60
Tuberculosis, all forms	100	83	17
Typhoid fever	-	-	-
Whooping cough	19	16	3
All others	104	95	9

Table 1

Resident Births
Southern Health District, 1959

Place of Delivery and Attendant	Total	White	Nonwhite
All Births	2,306	1,493	813
Hospital	2,233	1,458	775
Home	73	35	38
Private Physician	62	31	28
Midwife	5	2	3
Other	6	2	7

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southern Health District, 1959

Cause of Death	Total	White	Nonwhite
All Causes	786	613	173
Tuberculosis, all forms (001-019).....	13	5	8
Respiratory tuberculosis (001-008).....	13	5	8
Syphilis (020-029).....	1	-	1
Dysentery (045-048).....	1	1	-
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	1	1	-
Measles (085).....	2	2	-
Malignant neoplasms (140-205).....	124	105	18
Lymphatic and hematopoietic (200-205).....	3	2	1
Diabetes (260).....	16	13	3
Anemias (290-293).....	2	2	-
Vascular lesions of the central nervous system (330-334).....	40	32	8

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southern Health District, 1959

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	339	281	58
Chronic rheumatic heart disease (410-416)....	10	9	1
Arteriosclerotic and degenerative heart disease (420-422).....	263	226	37
Other diseases of the heart (430-434).....	5	5	-
Hypertensive heart disease (440-443).....	61	41	20
Other hypertensive diseases (444-447).....	2	2	-
Arteriosclerosis (450).....	11	8	3
Other diseases of the circulatory system (451-468).....	1	1	-
Nephritis and nephrosis (590-594).....	7	4	3
Influenza and pneumonia (480-483, 490-493).....	28	19	9
Pneumonia (490-493).....	28	19	9
Bronchitis (500-502).....	7	6	1
Ulcer of the stomach and duodenum (540-541)....	5	5	-
Appendicitis (550-553).....	1	-	1
Intestinal obstruction and hernia (560-570)....	5	4	1
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	5	3	2
Cirrhosis of the liver (581).....	14	12	2
Hyperplasia of prostate (610).....	2	2	-
Puerperal causes (640-689).....	2	1	1
Congenital malformations (750-759).....	10	5	5
Certain diseases of early infancy (760-776)....	56	29	27
Pneumonia of newborn (763).....	1	1	-
Senility, ill-defined and unknown conditions (780-795).....	2	1	1
All other diseases.....	40	31	9
Accidents, total (800-962, 965).....	39	29	10
Motor vehicle accidents (810-835).....	14	12	2
All other accidents.....	25	17	8
Suicides (963, 970-979).....	8	6	2
Homicides (964, 980-985).....	2	2	-

Table 3

Communicable Diseases Reported
Southern Health District, 1959

Disease	Total	White	Nonwhite
Total	672	306	367
Chickenpox	49	27	22
Diphtheria	1	-	-
German measles	4	4	1
Gonococcal infections	210	35	175
Measles	113	80	33
Meningococcal infections	7	-	1
Mumps	18	9	9
Poliomyelitis, paralytic cases ...	3	2	2
Scarlet fever	9	5	4
Syphilis	79	25	54
Tuberculosis, all forms	84	37	27
Typhoid fever	1	-	1
Whooping cough	9	2	7
All others	90	59	31

PERINATAL WASTAGE FOLLOWING THE 1957 OUTBREAK OF ASIAN INFLUENZA IN BALTIMORE CITY*

In the fall of 1957, when the world-wide progress of Asian influenza made it apparent that Baltimore City would soon experience an appreciable outbreak, plans were made to follow the course of this disease and to ascertain if possible its effect on pregnancy wastage. The course of Asian influenza in the community was followed by means of absentee reports from public elementary schools, industrial absentee reports, and mortality statistics. At that time it was proposed that the possible effect of Asian influenza on embryologic development might be followed by determining the extent of reproductive wastage -- fetal deaths, neonatal deaths and congenital malformations -- among infants of women who were in their first trimester of pregnancy during the disease outbreak. The purpose here is to describe the local impact of Asian influenza on perinatal wastage as determined from vital records -- the fetal death certificate, the birth certificate and medical supplement, and the death certificate.

Design of the Study

The number of deaths ascribed to influenza and pneumonia each week in the last few months of 1957 and the early part of 1958 is shown in Figure 1. In contrast to the maximum number of deaths for the comparable weeks in the previous 7 year period, this graph shows that mortality from influenza and pneumonia in Baltimore City increased significantly during the period beginning about October 17 through November 28, 1957.

Absentee reports and serologic evidence supported the suspicion that Asian influenza was present in the community at that time. For the purpose of this study the period from October 17 to November 28 was taken as the time during which Baltimore's population was exposed to Asian influenza.

*By Todd M. Frazier, Sc.M., Director of the Bureau of Biostatistics and Robert E. Farber, M.D., M.P.H., Director of the Bureau of Communicable Diseases, Baltimore City Health Department

It has been hypothesized that diseases like Asian influenza, when acquired during early pregnancy, increase the chance of reproductive wastage. To test this hypothesis, indices of reproductive wastage were computed for infants of women who were in their first trimester of pregnancy during October and November, the months that Asian influenza was prevalent in Baltimore. These rates have been compared to the rates obtained for control periods designated in the following manner:

Month of Last Menstrual Period	MONTH NUMBER											
	4	5	6	7	8	9	10	11	12	1	2	3
	7	8	9	10	11	12	1	2	3	4	5	6
End of First Trimester	1	2	3	4	5	6	7	8	9	10	11	12
Expected Month of Confinement	↓			↓				↓				
	Births in the months of Jan. Feb. & March, 1958, make up the			Births in the months April through August, 1958, make up the				Births in the months September through December, 1958, make up the				
	Pre-Influenza Control			Asian-Influenza Group				Post-Influenza Control				

Several indices of perinatal wastage for the control and Asian influenza periods are shown in the following table:

Table 1
Indices of Reproductive Wastage for
Control and Asian Influenza Periods
Baltimore City, 1958

	Total Births	Fetal Deaths		Premature Births		Neonatal Deaths		Congenital Malformations	
		Number	Ratio ^{1/}	Number	Per Cent	Number	Rate	Number	Rate
Pre-Asian Influenza	5,928	97	16.4	646	10.9	140	23.6	50	8.4
Asian Influenza	10,072	209	20.8	1,176	11.7	281	27.9	78	7.7
Post-Asian Influenza	8,464	138	16.3	912	11.5	222	26.2	49	5.8

^{1/} Ratio per 1000 live births. The neonatal death rate is on the basis of 1000 live births.

^{2/} The number of congenital malformation cases consists of the recognized malformations among live born infants plus fetal deaths in which the cause of death was congenital malformation (Y38.0 - 38.7).

The increase in the number of fetal deaths during the Asian influenza period compared to the combined control group is significant ($p < 0.01$). Although the neonatal death rate increased during the influenza period, this difference was not significant; nor are the differences in the rates of prematurity and congenital malformations.

In appraising the increase in fetal deaths it is necessary to consider the possibility of a similar pattern in years when Asian influenza was not prevalent in the community. The following table shows the fetal death rates for comparable periods for the years 1955-1957.

Table 2
Fetal Death Ratio

P E R I O D	1958	Average ^{1/} 1955-1957
Jan.-March (Pre-Asian Influenza Control, 1958)	16.4	17.6
April-August (Asian-Influenza, 1958)	20.8	18.0
Sept.-Dec. (Post-Asian Influenza Control, 1958)	16.3	16.7

^{1/}Fetal deaths per 1000 live births

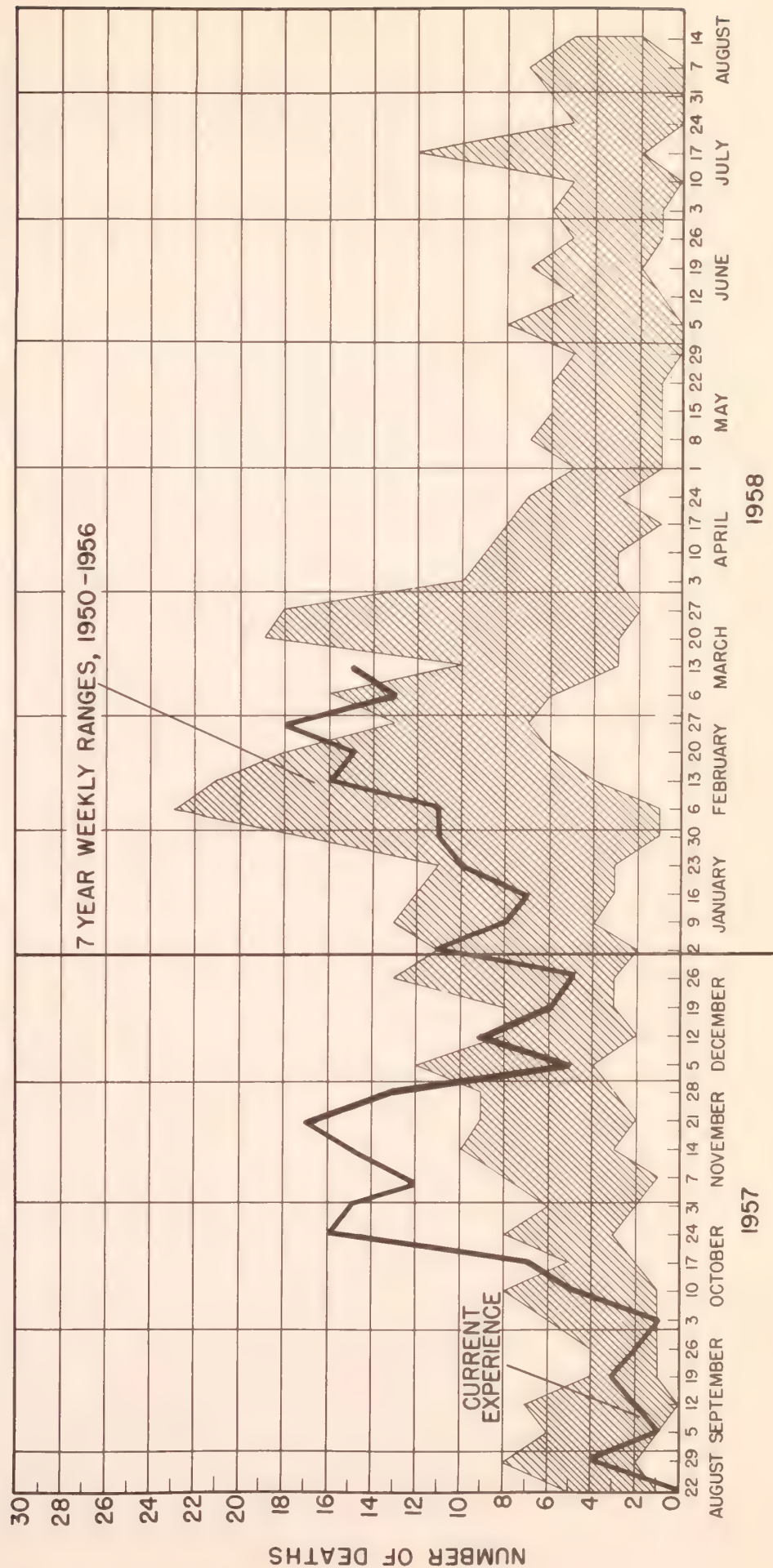
Although a seasonal increase is suggested by the average fetal death rates for the three year period 1955-1957, this is not a significant increase.

The average duration of pregnancy for the 444 fetal deaths reported in 1958 was 34 weeks. Consequently, on the basis of the month of the last menstrual period, some of the deaths assigned to the Pre-Asian Influenza group actually belonged in the Asian-Influenza group. In a similar manner some of the Asian-Influenza fetal deaths belonged in the Post-Asian Influenza Control group. It appears that the net effect of this works against the demonstration of an increased proportion of fetal deaths during what is called the Asian-Influenza period.

The observation of increased fetal mortality among parturients who were in their first trimester of pregnancy at a time when Asian influenza was prevalent in Baltimore City suggests the possible relationship between Asian influenza and fetal death. This may be an area in which a vital record study at the national level is needed. In a more extensive study of this type the month of last menstrual period should be used to define exposed and control groups in preference to the indirect method of assignment used in this report.

BALTIMORE'S EXPERIENCE INFLUENZA AND PNEUMONIA DEATHS

BY WEEKS FOR 1957-1958 COMPARED TO THE 7 YEAR
WEEKLY RANGES FOR 1950-1956



**BALTIMORE CITY HEALTH DEPARTMENT
RESEARCH AND PLANNING SECTION**

QUARTERLY

STATISTICAL

REPORT

MARRIAGES

BIRTHS

MORTALITY

MORBIDITY

FOURTH QUARTER 1960

MARCH 7, 1961 VOL.12 NO.4

BALTIMORE CITY HEALTH DEPARTMENT

HUNTINGTON WILLIAMS, M.D.

Commissioner

RESEARCH AND PLANNING SECTION

MATTHEW TAYBACK, Sc.D.

Assistant Commissioner of Health

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation."

Quetelet

Inquiries concerning the materials published, should be addressed to Mr. Todd M. Frazier, Director, Bureau of Biostatistics, Baltimore City Health Department, Baltimore 3, Maryland.

Table of Contents

	Page
A Summary of Vital Events	1 - 12
B Annual Rates by Month for Births and Selected Causes of Death	13
C Morbidity Rates by Month	14
D Tables of Vital Events	15 - 18
I Marriages, Births, Deaths by Race	15
II Deaths from Selected Causes	16
III Cases and Deaths from Selected Causes and Infant Deaths by Health Districts	17
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths and Tuberculosis Hospital Admissions	18



BALTIMORE'S HEALTH RECORD FOR 1960

Favorable aspects of Baltimore's health record for 1960 include, a six per cent reduction in the infant mortality rate, the continuation of a very low maternal mortality rate, another year without a single case of diphtheria, and a reduction in the number of children poisoned by eating lead paint. Several unfavorable developments which occurred were: (1) an unexpected outbreak of paralytic poliomyelitis, (2) a further rise in reported cases of infectious syphilis over the low levels achieved several years ago and (3) a disappointing slow-up in the decline of tuberculosis illness and mortality.

The general health of the city can be assessed crudely by examination of the death rate from all causes which was 12.5 in 1960 and 12.0 in 1959, a slight increase. The principal causes of death maintained their relative positions and in order of frequency of occurrence were: diseases of the heart, cancer, cerebral hemorrhage, diseases of early infancy and accidents. In recent years, this sequence has not changed in any significant manner.

Population

The eighteenth decennial census of the population was undertaken by the U. S. Bureau of the Census during April, 1960. Although complete results are not yet available, the final count has been released and indicates that the number of residents of Baltimore City as of July 1, 1960 was 939,000, a loss of 11,000 or one per cent since 1950. This trend is consistent with the experience in nearby cities such as New York, Philadelphia and Washington, D. C. each of which declined in population at a greater rate than Baltimore.

While the city's population total did not change appreciably, provisional estimates based on the 1960 Census show that marked changes in the characteristics of the population have taken place. The number of white residents has declined in the

1950-1960 decade from 723,000 to 627,000, a drop of 96,000 or 13 per cent. During the same period the number of Negro residents has increased from 227,000 to 312,000, an increase of 85,000 or 37 per cent. The effect of these changes alters the racial composition from 23.9 per cent Negro to 33.2 per cent.

The economic status of the population is difficult to assess. The number of persons receiving public assistance represents an index of the extent of severe economic distress. In 1950 there were 27,670 individuals receiving some aid from the Department of Public Welfare. By 1960 the number had risen to 37,572, a 36 per cent increase.

The cost of local government is affected in an important way by the number of children served by the public schools. In this connection, the September census of public school children in 1950 was 118,000 and in 1960 the figure had risen by 44 per cent to 170,000.

Thus while the population declines slowly, public obligations grow significantly. Were the city to depend upon its own resources to meet the responsibility for the welfare of the economically deprived or of the public education of a peak school age population, the burden on a diminishing productive base could easily accelerate patterns of migration which are fiscally unhealthy for this community. It is for this reason that state aid and federal assistance appear logical to provide a cushion of support while the city passes through an unusually difficult period during which economically depressed individuals concentrate here.

Maternal and Child Health

Conditions which are associated with optimal maternal and child health are generally believed to be (1) pregnancy which is the result of a stable marital relationship (2) early and adequate prenatal care (3) delivery in a properly staffed obstetrical

service of a general hospital (4) sufficient and expert care in a premature nursery if the newborn is premature and (5) regularly scheduled well baby supervision during the first year of life.

Whether a stable marital relationship exists at the time of birth is difficult to establish. It can be presumed however that an illegitimate birth is generally inconsistent with the concept of a stable parental circumstance. Continuing studies of the problem of illegitimacy indicate that not less than 15 per cent or 3,500 of the resident live births in Baltimore were illegitimate in 1960. Although the nature of this problem makes it a concern of the health department, the methods required to achieve some degree of control are not usually within the scope of health department work. It is gratifying however to report that the Baltimore Urban League has developed a project designed to strengthen family life which, if it continues to receive support, should mold attitudes which will help to minimize the problem of illegitimacy.

The pattern of seeking medical care early in pregnancy is generally accepted by women in middle and upper economic circumstances. However, in the lower economic areas of the city, mothers often delay or fail to seek prenatal care. This causes a particularly difficult situation for the obstetrical staff at the Baltimore City Hospitals, and is believed to account in part for the higher infant mortality found among infants born to mothers who are subject to poor economic conditions. In spite of this handicap Baltimore once again in 1960 had an excellent overall record in maternal mortality with a rate of 3.9 deaths per 10,000 births. However, of nine maternal deaths, eight were among Negro mothers. Thus the Negro maternal mortality rate was 7.1 and the equivalent figure for white mothers was 0.8. This difference is a tragic instance of a failure to overcome the apathy among the mothers who will not seek early and adequate prenatal care.

Infant Mortality

Since 1957, the Baltimore City Health Department has been especially concerned with a rise in infant mortality which analysis indicated was due to an increase in the death rate for premature babies. A number of steps were undertaken to reduce the loss of life among infants. These included: (1) Biostatistical and epidemiological investigation to pin down several likely factors, (2) conferences with the pediatric and obstetrical department heads of the major hospitals designed to exchange expert opinion on the methods required to minimize newborn mortality, (3) more vigorous enforcement of the City Maternity Hospital Ordinance and Regulations and (4) assisting in securing more nursing staff for the premature nursery at the Baltimore City Hospitals.

It can be reported that a reduction in the number of infant deaths and particularly Negro infant deaths was achieved in 1960 by contrast with the prior three years. The infant mortality rate for 1960 and for recent years was as follows:

<u>Year</u>	<u>Total</u>	<u>White</u>	<u>Negro</u>
1960	33.4	25.5	41.7
1959	35.4	25.0	47.0
1958	35.2	27.4	44.7
1957	34.6	24.8	47.7
1956	30.0	23.8	39.0
1955	31.0	23.7	42.9

When translated into human values, the infant mortality drop from 35.4 per 1,000 live births to 33.4, about 6 per cent, resulted in the saving of 47 infant lives. There are few who would dispute the value of the intensive campaign recently carried on by this Department to turn back the rising trend in infant loss. Indeed the infant mortality rate is very widely considered to be the most delicate index of general community health.

The total number of births to residents of Baltimore City declined for the third year in a row. From a peak of 25,067 in 1957, the number has dropped to 23,283. Although a decline in white births has been noted before and was repeated in 1960, dropping from 12,577 in 1959 to 12,025, the lowest level since 1941, there was an unexpected drop also in Negro births from 11,316 in 1959 to 11,258 in 1960. It is too early to interpret the significance of this development.

In the meanwhile the fall in resident births and in the total recorded births should provide some respite to obstetrical services which were continuously overwhelmed by rapidly rising censuses following World War II.

Mental Hygiene

Mental illness is predominant among the health problems of our time because so many individuals are affected and because the illness is apt to be chronic and active during one's productive working years. The attack on mental illness requires: (1) investigation to determine how this complex of conditions is distributed in the population, (2) services to prevent the development of disabling mental disease, and (3) services to minimize the extent of disability which accompanies mental illness. In each of the areas listed, measurable progress has been made.

Studies of the extent of emotional maladjustment among school age children, which were completed in 1960, indicate that 13 per cent have behavioral characteristics indicative of the need for attention by the staff of a mental hygiene clinic. This need is greater among male children.

On the basis of data available from the State Department of Mental Hygiene, the number of Baltimore City residents who were inpatients in the state mental hospitals on July 1, 1960 was 4,691. In addition an estimated 1,000 residents were inpatients in other psychiatric facilities. Consequently, at a given point in time six out of each

1,000 residents are institutionalized for mental illness. In addition, another three per 1,000 are under active treatment in one of the several outpatient psychiatric clinics. These latter quantities are quite consistent with the survey findings among children.

It is usual, among the patients described above, to find that the disability due to mental illness in adulthood is the result of a life pattern, the origins of which lie in childhood. It is because of this that prevention of mental illness is centered about the development of healthy behavioral patterns in children. In this connection, it is noteworthy to mention several types of facilities in Baltimore that are engaged in preventive mental hygiene work with children, namely the Children's Guild, concerned with preschool age children, the Baltimore City Health Department's mental hygiene clinics for school-age children under contract with the University of Maryland and Johns Hopkins and its Division of Mental Hygiene Education, the Children's Psychiatric Service of Johns Hopkins Hospital and the Division of Special Services of the Department of Education. The sum total of the work of these units does not approximate even half of the need which has been found by an expert psychiatric team. Insufficient preventive work in mental hygiene always leads to costly curative efforts of limited benefit.

A new facility was proposed late in 1960 to reduce the cost of care for the mentally ill. Known as a day care center, it would provide a treatment facility, halfway between the hospital and the outpatient clinic. Since it would be a community service it is expected that it would be a joint venture of the Baltimore City Health Department and the State Department of Mental Hygiene.

Tuberculosis

The usual methods employed to measure the extent of progress in the control of tuberculosis provide evidence of little advance, if any, in Baltimore's battle with this tenacious disease. It is estimated that 823 new cases of tuberculosis were reported in 1960 which is a decrease of 10 from 833 cases reported in 1959. The rates per 100,000 population for these cases first reported in 1960 were: total 88, white 52, Negro 160. The record of mortality due to tuberculosis leads to the same inference. The number of tuberculosis deaths in 1960 was 142, a figure almost identical with the 145 deaths reported in 1959. Although a difference of this type cannot be regarded as significant it does indicate that little progress was made.

The number of city residents with tuberculosis actually hospitalized at the end of the year declined from 866 in 1959 to 725 in 1960. This is largely due to a reduction in the average length of stay per admitted patient which is possible because of chemotherapy. However it must be emphasized that early discharge of patients places increased responsibility upon the local tuberculosis control agency. A manifestation of this growing trend is provided by the increasing number of individuals who receive chemotherapy from the Baltimore City Health Department and who numbered 1,685 in 1960 contrasted with 1,326 in 1959.

Other Communicable Diseases

Another year has passed without a case of diphtheria in Baltimore. Once a dreaded killer of children, diphtheria is so rare now that it is unlikely that more than five per cent of physicians training today will ever see a case of the disease. This is the ultimate in prevention. Within the near future, eradication of paralytic poliomyelitis should also be possible, and then this city may be able to do likewise with measles and mumps for which vaccines are now under test.

Although it is possible to reduce the incidence of paralytic poliomyelitis to a level of little public health significance by the widespread use of the currently available killed virus vaccine, an outbreak of this disease occurred in 1960 affecting 97 individuals of whom 74 were under ten years of age. The attack rate among unvaccinated children of this age was 86.6 per 100,000 as contrasted with 14.4 for children who had three or more doses of the vaccine. The reduction is 84 per cent which indicates how effective the vaccine was during the outbreak. Had each child under 10 years of age been properly inoculated, there would have been 30 cases instead of 74. The excess of 44 cases of paralytic poliomyelitis is the result of ignorance or neglect or both on the part of parents. The vaccine could have been secured from a personal physician or from a Baltimore City Health Department clinic. The Department continued to seek more effective methods to attack this community problem. Leading a horse to water will not make him drink.

There are certain advantages to a live virus vaccine given orally as compared to the currently used dead virus vaccine given by injection. It may be expected that a safe oral vaccine will be available in 1962. Until then it is necessary that parents secure for their children a full series of four inoculations of the effective poliomyelitis vaccine now available. A child not protected is neglected.

Among the more common communicable diseases, the incidence of typhoid fever in 1960, two cases, was at about the same level as during the past four years. A predicted upswing in the occurrence of mumps took place with 1,115 cases reported compared to 669 in 1959, and 283 in 1958. There was also a rise in cases of measles, 2,200 cases reported in 1960 as contrasted to 1,138 in 1959.

In assessing the effectiveness of venereal disease control work, an important index to determine is the number of new cases of infection with syphilis, that is, primary and secondary cases. In 1960, a total of 270 cases of infectious syphilis was reported, an unexpected and disturbing increase above the incidence of 196 cases in 1959. This is consistent, however, with nationwide experience. When one considers

the extent of promiscuity, evidence of which is found in the reported cases of gonorrhea, 6,243 in 1960, it is fortunate indeed that the number of new infections with syphilis was at the comparatively low figure reported in 1960.

Accidents

The term accident implies an event which is fortuitous and unpredictable. However, when one considers the annual record of death and disability ascribable to automobile accidents, the capability of making accurate forecasts is more apparent than the term accident would imply. For example, data from the Baltimore City Police Department provide the following record of accidents, deaths and injuries due to motor vehicles:

Automobile Accident Experience in Baltimore City 1955-1959

<u>Year</u>	<u>Accident Reported</u>	<u>Persons Killed</u>	<u>Persons Injured</u>
1959	17,800	107	8,550
1958	16,650	107	7,625
1957	17,991	110	8,102
1956	19,429	110	8,360
1955	18,049	94	7,646

From a cursory examination of these data, it could be predicted that the 1960 experience would be say 18,000 accidents, 110 deaths, and 8,100 persons injured. Actually the appropriate numbers were:

1960	18,391	112	8,419
------	--------	-----	-------

The factors which determine the magnitude of the accident experience operate in a sufficiently stable manner that accurate predictions can be made. In this sense we are in a position to evaluate the new penalty point system which will

be administered by the State Department of Motor Vehicles starting in January, 1961. The motor vehicle accident experience for 1961 in the absence of such a new control measure could be accurately forecast. If actual experience is significantly below the prediction then one may to a certain degree ascribe the drop to the new system.

Principal Causes of Death

Earlier in this report, it was indicated that the principal causes of death were diseases of the heart, cancer, cerebral hemorrhage, diseases of early infancy and accidents from all causes. The first three account respectively for 42 per cent, 17 per cent, and 8 per cent of all deaths. They are the great killers of our time. At present, concepts of prevention of these conditions are general and sometimes backed by little evidence. However, in recent years, epidemiologists and biostatisticians have assembled data which are specific, pertinent and can be used as a reasonable basis for the extension of life.

For example, the relationship of heavy cigarette smoking to lung cancer is so well established that the Baltimore City Health Department has twice published its conviction that heavy cigarette smoking is the most important cause of lung cancer. If an individual wishes to minimize the risk of lung cancer, he may do so by giving up too frequent cigarette smoking.

The relationship of body weight and blood pressure to length of life, which has been established by actuarial studies, appears to indicate that the achievement of optimal weights for specific body builds can slow the degenerative processes which underlie the diseases of the cardiovascular system and which result in cerebral hemorrhage. Thus reasonable medically controlled emphasis on diet and weight control is not misguided. What is important is the necessity to pursue individual regimens in conformance with expert medical opinion which for each individual is best secured from his personal physician.

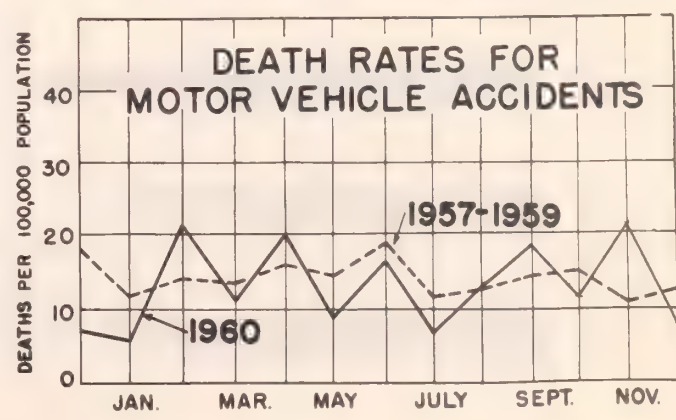
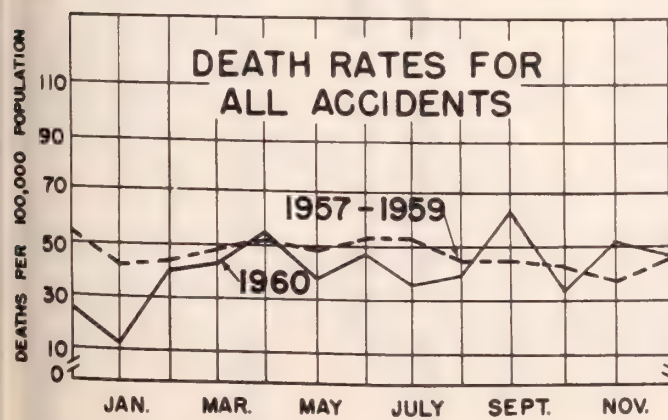
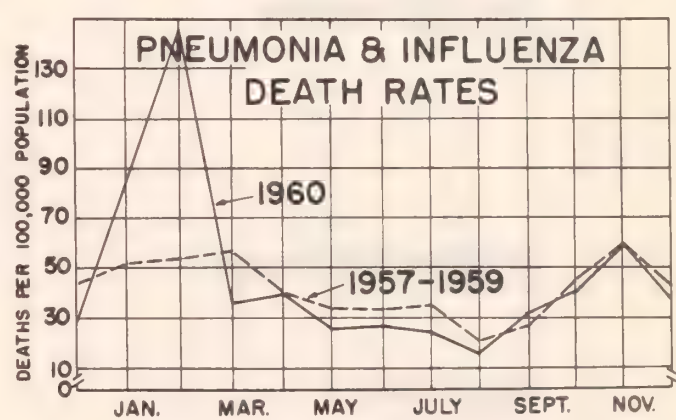
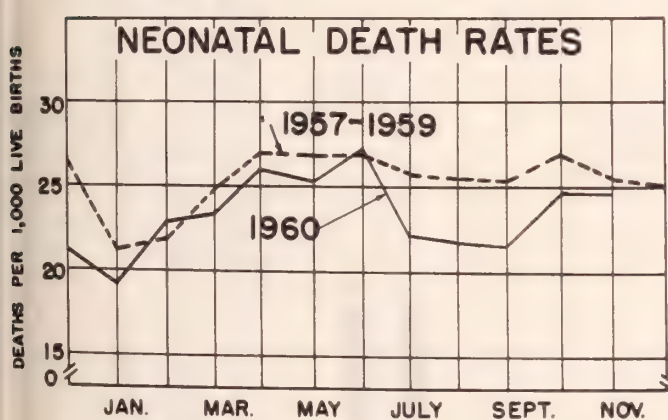
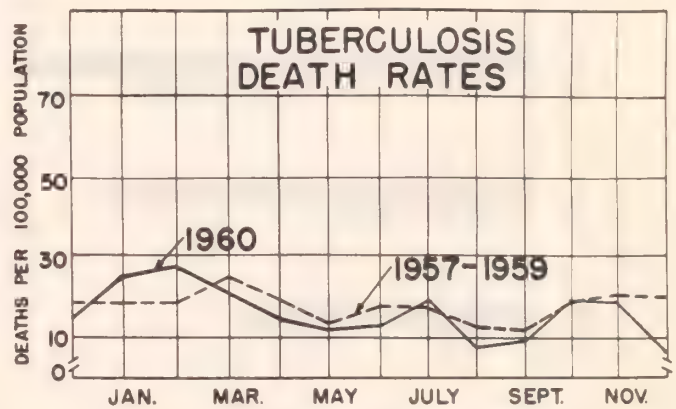
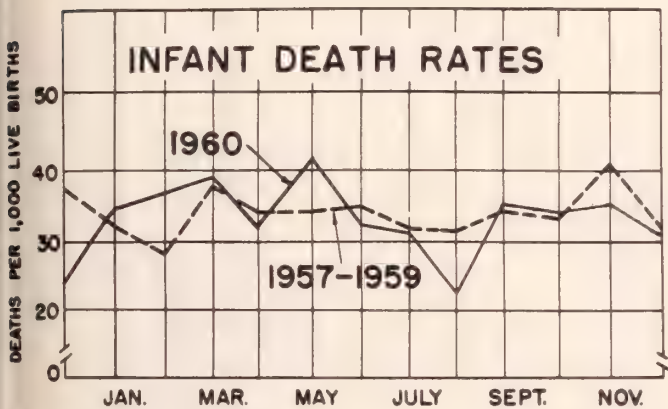
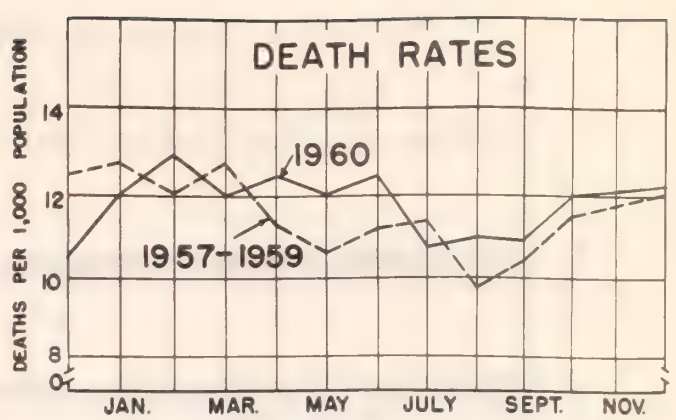
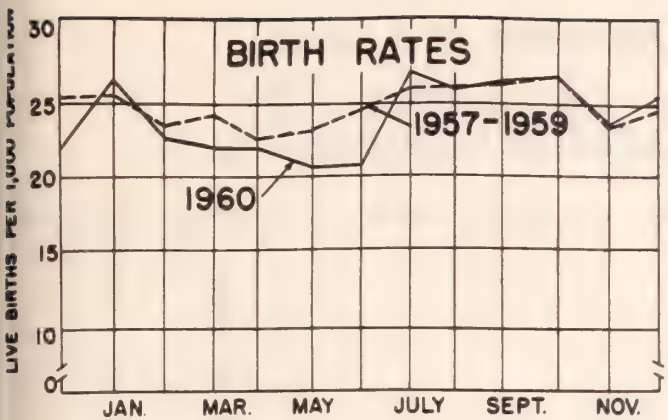
An examination of the vital statistics relating to the frequency of death from the great killers indicates that little change takes place from one year to the next. However, the average expected lifetime does actually increase as the years go by and results in the survival of more persons into the older age groups. So, small but definite advances are being made in reducing the years of life lost due to the early onset of degenerative disease.

Conclusion

Whether one deals with a problem such as lead paint poisoning in children due to poor housing and lack of parental supervision, or paralytic poliomyelitis much of which occurs in children who are not protected by vaccination because of parental ignorance or neglect, or infectious syphilis which is the result of promiscuous sexual relations, one finds that many of the public health problems faced by the Health Department are confined to those areas of the city which are characterized by substandard housing conditions, declining neighborhood values, and by poor economic conditions. These areas are also a special concern of the Urban Renewal and Housing Agency, the Police Department and several other city agencies. The effect of this mutual interest in the same geographic areas may be enhanced by coordinated efforts. An attempt at using this approach, is now under way in what is known as the Experimental Conservation District. It will merit close attention and evaluation.

Although the traditional functions of a health department are the control of communicable diseases, the correction of nuisances and the protection of the health of mothers and children, the tenor of current day thinking on priorities appears to emphasize the extension of medical care benefits to segments of the population especially in need. Examples are care for the medically indigent aged and the development of comprehensive and adequate community based facilities for residents requiring mental hygiene services. These are important and represent broad new responsibilities which the

Health Department is called upon to shoulder. The Baltimore City Health Department intends to meet these challenges. A serious handicap is the lack of an adequate headquarters building to accommodate a modern laboratory, provide space for personnel concerned with new responsibilities and permit efficient working relationships. The correction of this handicap will do much to provide Baltimore with a standard of public health consistent with its status as a great medical center of world fame.



BALTIMORE CITY HEALTH DEPARTMENT
 1960 BALTIMORE HEALTH SURVEY
 MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS, (275 - 325 PERSONS) BY MONTHS

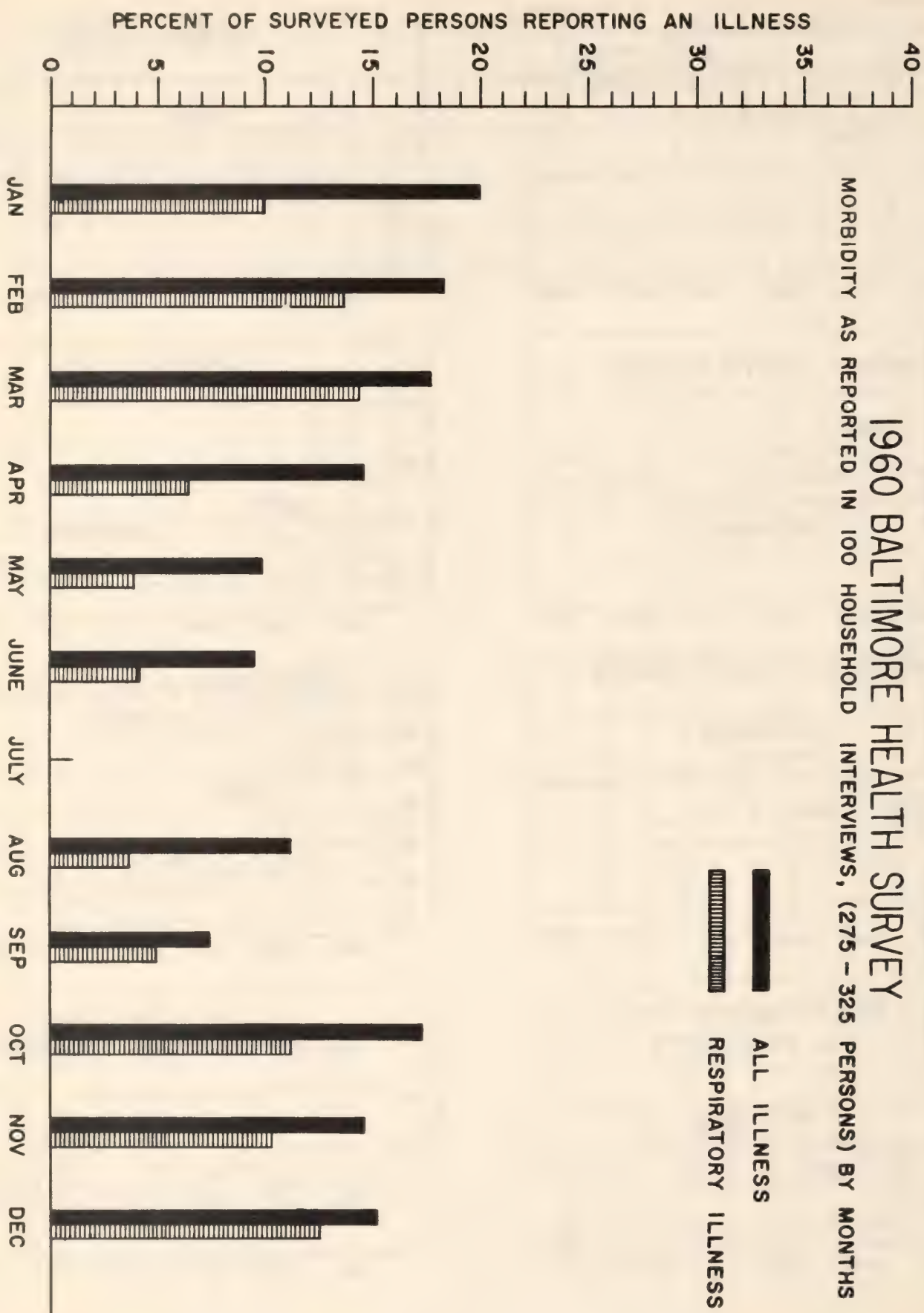


TABLE I

MARRIAGES RECORDED, RESIDENT BIRTHS, DEATHS AND INFANT DEATHS
AND CORRESPONDING RATES BY RACE: FOURTH QUARTER, 1960 AND 1957-1959

Vital Event	October-December				January-December	
	Number		Rate*		Rate*	
	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59
ALL RACES						
Marriages recorded.....	2,190	2,322	9.4	9.4	10.1	10.5
Births.....	5,841	6,286	25.0	25.4	25.3	26.0
Deaths, all causes.....	2,806	2,918	12.0	12.0	12.5	12.7
Deaths, under one year.....	194	230	33.2	36.6	33.4	34.8
under 28 days.....	144	161	24.7	25.6	23.8	26.0
28 days-11 months.....	50	69	8.5	11.0	9.6	8.8
WHITE						
Marriages recorded.....	1,325	1,458	8.5	8.5	9.7	9.9
Births.....	3,049	3,443	19.6	20.1	20.1	20.8
Deaths, all causes.....	1,982	2,051	12.7	11.9	13.5	12.4
Deaths, under one year.....	72	86	23.6	25.0	25.5	25.6
under 28 days.....	60	62	19.7	18.0	18.8	19.3
28 days-11 months.....	12	24	3.9	7.0	6.7	6.3
NONWHITE						
Marriages recorded.....	865	864	11.2	11.4	11.0	11.8
Births.....	2,792	2,843	36.0	37.4	34.9	37.5
Deaths, all causes.....	824	867	10.6	11.4	10.6	11.1
Deaths, under one year.....	122	144	43.7	50.7	41.7	46.0
under 28 days.....	84	99	30.1	34.9	29.0	34.2
28 days-11 months.....	38	45	13.6	15.8	12.7	11.8

*Infant mortality rates are per 1,000 live births. All other rates -- marriage, birth and death -- are on an annual basis per 1,000 population estimated as of July 1, 1960 total, 939,000; white 627,000; nonwhite 312,000.

TABLE II

RESIDENT DEATHS FROM SELECTED CAUSES
FOURTH QUARTER, 1960 AND 1957-1959

Cause of Death	October - December				January - December	
	Number		Rate per 100,000*		Rate per 100,000*	
	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59
All Causes	2,806	2,918	12.2	11.8	12.5	11.5
Tuberculosis (001-019).....	34	47	14.8	19.0	16.8	18.2
Syphilis (020-029).....	6	10	2.6	4.0	2.5	4.7
Cancer (140-205).....	474	447	206.8	180.5	206.1	185.4
Diabetes Mellitus (260).....	70	56	30.5	22.6	26.4	24.1
Vascular Lesions of the Central Nervous System (330-334).....	222	215	96.8	86.8	96.9	87.3
Diseases of the Heart (410-443).. <td>1,158</td> <td>1,251</td> <td>505.1</td> <td>505.1</td> <td>509.4</td> <td>486.7</td>	1,158	1,251	505.1	505.1	509.4	486.7
Influenza and Pneumonia (480-483, 490-493).....	103	120	44.9	48.4	48.5	41.4
Nephritis and Nephrosis (590-594).....	21	28	9.2	11.3	8.7	10.2
Puerperal Causes (640-652, 670-689).....	1	3	0.4	1.2	0.8	1.2
Congenital Malformations (750-759).....	24	34	10.5	13.7	16.5	13.6
Certain Diseases of Early Infancy (760-776).....	134	147	58.5	59.3	57.4	57.3
Suicides (963, 970-979).....	23	21	10.0	8.5	9.1	9.6
Homicides (964, 980-999).....	21	21	9.2	8.5	12.4	9.3
Accident (800-802, 810-835, 840-962).....	71	104	31.0	42.0	39.7	46.3
Motor Vehicle (810-835).....	31	35	13.5	14.1	13.9	14.9

*Rates shown for all causes are per 1,000 population.

TABLE III

CASES AND DEATHS FROM SELECTED CAUSES, AND INFANT DEATHS BY HEALTH DISTRICTS
FOURTH QUARTER, 1960 AND 1957-1959 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Southeastern		Southern		Western		Druid		Northwestern	
	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59	1960	Average 1957-59
Infant deaths	194	231	56	80	39	22	11	20	13	33	6	46	0	28
Tuberculosis, Cases all forms Deaths	196 34	216 47	52 8	64 11	24 8	29 8	19 9	20 4	39 4	22 6	62 3	57 15	0 0	23 4
Syphilis Cases Deaths	371 6	334 10	102 2	84 3	16 1	22 1	23 2	17 0	93 0	34 7	131 0	137 4	0 0	35 1
Typhoid fever Cases Deaths	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Diphtheria Cases Deaths	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Whooping Cough Cases Deaths	18 0	22 0	6 0	10 0	3 0	2 0	1 0	3 0	1 0	2 0	7 0	3 0	0 0	1 0
Meningococcal Cases Deaths	1 0	6 2	0 0	2 1	0 0	1 0	0 0	0 0	1 0	0 0	0 0	2 7	0 0	0 0
Measles Cases Deaths	96 0	543 1	17 0	227 0	42 0	59 0	3 0	48 0	16 0	47 0	18 0	96 0	0 0	68 0
Acute poliomyelitis (paralytic) Cases Deaths	57 4	6 0	22 1	0 0	14 0	0 0	8 0	2 0	5 3	1 0	8 0	0 0	0 0	1 0

All figures corrected for residence within Maryland

*Totals include some intrastate transfers allocated to Baltimore City but not otherwise allocated to health districts

TABLE IV

Newly Reported and Reactivated Cases of Tuberculosis
Tuberculosis Deaths and Tuberculosis Hospital Admissions
Fourth Quarter, 1960 and 1959

	OCTOBER-DECEMBER		JANUARY-DECEMBER	
	Total		Total	
	1960	1959	1960	1959
Newly Reported Cases.....	191	181	823	833
White.....	80	81	323	379
Nonwhite.....	111	100	500	454
Reported After Death.....	10	11	40	40
Number of Readmissions.....	27	26	95	104
White.....	12	9	48	56
Nonwhite.....	15	17	47	48
Number of Tuberculosis Deaths.....	36	42	142	145
White.....	22	19	80	75
Nonwhite.....	14	23	62	70
Number of Patients Admitted to Tuberculosis Hospitals.....	183	283*	809	952*
Number of Patients on Chemotherapy December 31, 1960.....			1,685	
Started in 1960.....			800	
Started prior to 1960.....			885	

*1958 Figure





BALTIMORE CITY HEALTH DEPARTMENT
RESEARCH AND PLANNING SECTION

QUARTERLY

STATISTICAL

REPORT

BIRTHS

MARRIAGES

MORBIDITY

MORTALITY

FIRST & SECOND QUARTERS - 1961

SEPTEMBER 18, 1961 VOL. 13, NOS. 1 & 2

BALTIMORE CITY HEALTH DEPARTMENT

HUNTINGTON WILLIAMS, M.D.
Commissioner

RESEARCH AND PLANNING SECTION

MATTHEW TAYBACK, Sc.D.
Assistant Commissioner of Health

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation."

Quetelet

Inquiries concerning the materials published, should be addressed to Mr. Todd M. Frazier, Director, Bureau of Biostatistics, Baltimore City Health Department, Baltimore 3, Maryland.

Table of Contents

	Page
A Summary of Vital Events	1 - 3
B Annual Rates by Month for Births and Selected Causes of Death	4
C Morbidity Rates by Month	5
D Tables of Vital Events	
<u>First Quarter</u>	
I Marriages, Births, Deaths by Race	6
II Deaths From Selected Causes	7
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	8
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths, Tuberculosis Hospital Admissions and Patients Receiving Chemotherapy	9
<u>Second Quarter</u>	
I Marriages, Births, Deaths by Race	10
II Deaths From Selected Causes	11
III Cases and Deaths by Health Districts	12
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths and Tuberculosis Hospital Admissions	13
E Dental Caries in Baltimore School Children After Seven Years of Fluoridation of the Public Water Supply	14 - 21

Vital Events - Baltimore, Maryland
January-June, 1961

Marriages and Births

The recorded marriage rate in Baltimore City for the first six months of 1961, 9.0 per 1,000 population remained at the level observed for the same period during the years 1958-1960. A comparison of birth rates for the first six months of 1961 and the comparable period for 1958-1960 also shows a consistent pattern, 24.2 births per 1,000 population for 1961 and 24.6 for the average of the past three years.

Mortality

A total of 5,887 resident deaths occurred during the first half of 1961, a rate of 12.6 per 1,000 population, compared to a three year average of 5,940, a rate of 12.7. Influenza and pneumonia deaths during the first quarter of 1961 accounted for 122 deaths, a decrease of 93 from the number that occurred during the first quarter of 1960. Motor vehicle accident death rates showed a 20 per cent decrease for the first half of 1961, compared to an average for the same period in 1958-1960.

Infant and Maternal Mortality

The infant mortality rate for the months January-June, 1961 was 34.0, a slight decrease from the 1958-1960 average of 34.8 and a marked drop from the 35.8 level observed for the first six months of 1960. The mortality experience among nonwhite infants has been over 40 deaths per 1,000 live births for the past four years, and reached a recent high of 47.7 in 1957. This rate dropped from 47.0 in 1959 to 41.3 in 1960 and is now 42.4 deaths per 1,000 live births. There is little hope that a nonwhite infant death rate of less than 40 per 1,000 live births will be achieved in 1961.

Morbidity

Information obtained from "The Baltimore Health Survey" indicated an increase in acute illnesses during March and April of 1961 when the per cent ill increased from approximately 10 per cent for January and February to 15 per cent for the next two months.

A total of 1,642 cases of measles was reported during the first half of 1961. There were no deaths among these cases. A poliomyelitis death in February of 1961 resulted from a case that was reported in September of 1960.

The number of newly reported cases of tuberculosis decreased from 428 in the first six months of 1960 to 390 in 1961, a drop of 38 cases or 9 per cent. Of these 390 cases, 378 were active. Reactivated cases (readmissions) showed an increase of 15 cases, 29.4 per cent over 1960. The number of admissions to tuberculosis hospitals dropped from 425 in the first half of 1960 to 394 in 1961, a decrease of 7.6 per cent. The number of patients on chemotherapy increased by nearly 19 per cent from 1960 to 1961.

Analysis of the cases in the current tuberculosis register showed that there were 3,273 cases as of June 30, 1960, compared to 3,449 in 1959, a decline of 5 per cent. Of the 3,273 cases on the register, 1,782 or 54 per cent were active.

Forty-three per cent of all cases registered were white and 57 per cent were nonwhite. Among the 1,782 active cases, 48 per cent were white residents and 52 per cent nonwhite. Seventy-one per cent of the active cases were males.

The prevalence rates for active tuberculosis cases in Baltimore City as of June 30, 1960 were 1.9 cases per 1,000 total population, white 1.4 and nonwhite 2.8. Corresponding rates for the previous year were 2.0 cases per 1,000 total population, white 1.5 and nonwhite 3.2.

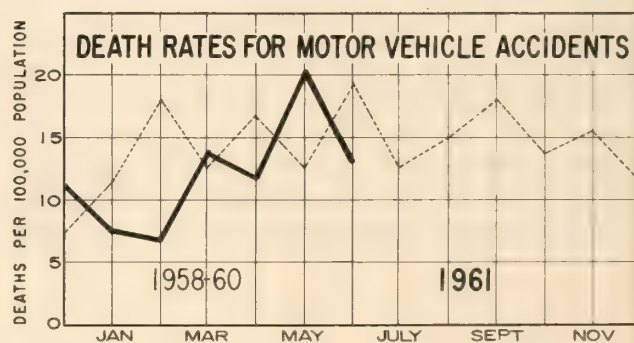
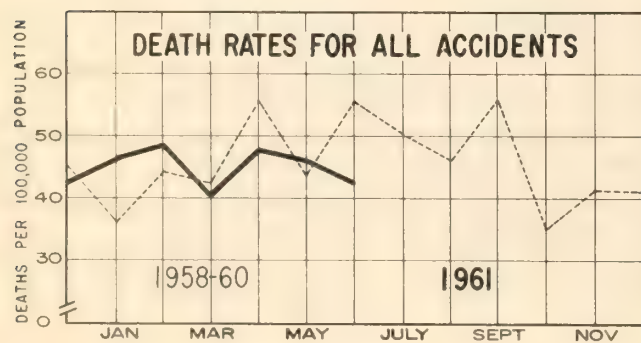
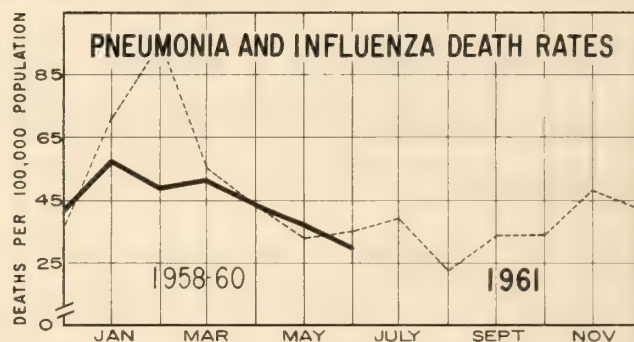
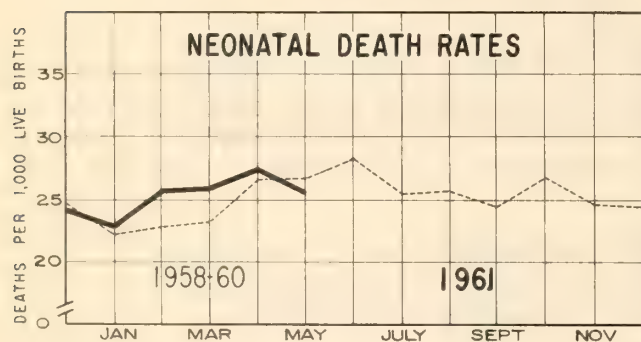
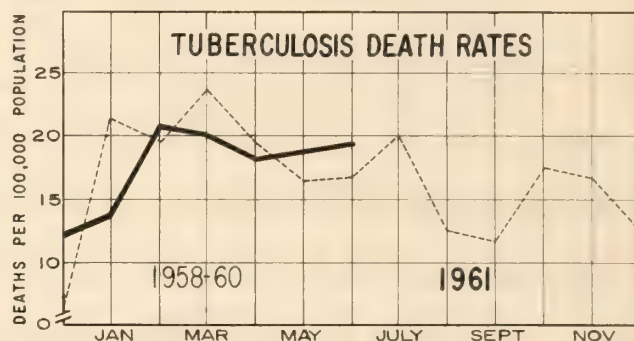
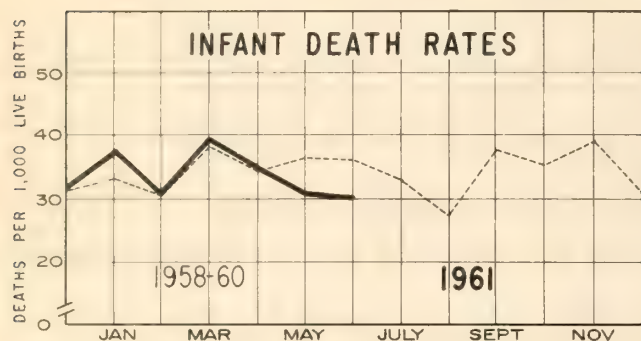
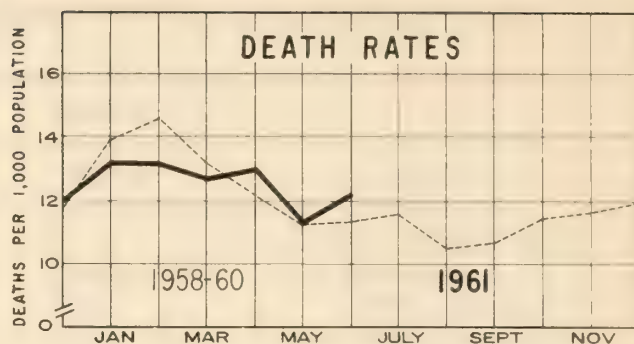
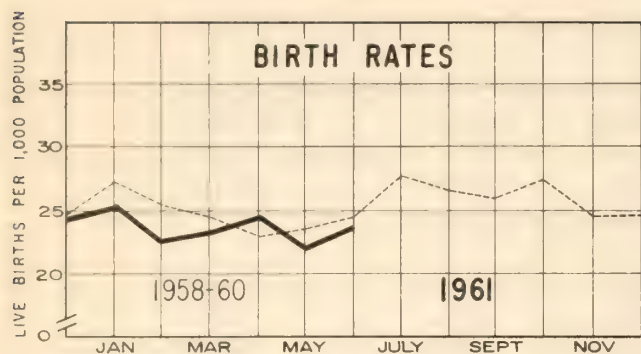
The following table shows the source of medical supervision for active cases on the register in 1959 and 1960.

	1960		1959	
	Number	Per Cent	Number	Per Cent
Total	1,782	100.0	1,915	100.0
Baltimore City Health Department	654	37.0	717	37.0
Hospital-OPD	199	11.0	174	9.0
Private physicians	112	6.0	118	6.0
Institutions	719	40.0	839	44.0
TB hospitals	674	..	798	..
Other	45	..	41	..
No medical supervision	98	6.0	67	4.0

Home visits by public health nurses and follow-up letters from the Director of the Bureau of Tuberculosis were used in a continuing campaign to bring non-supervised cases under medical care.

Among the 1,063 non-institutionalized active cases, 620 or 58 per cent received drugs supplied by the Baltimore City Health Department. In 1959 this figure was 44 per cent. In all, as of June 30, 1960, there were 1,453 patients receiving chemotherapy supplied by the Baltimore City Health Department.

Thirty-seven per cent of the 691 institutionalized active and inactive cases were in the Baltimore City Hospital, 44 per cent in State hospitals, 13 per cent in Federal hospitals and 6 per cent in private hospitals. In addition 40 persons with active tuberculosis were in mental or penal institutions. There were 5 cases in general hospitals that were to be transferred to tuberculosis hospitals. The total of 736 persons under institutional care represents a decline of 12 per cent from the previous year.



BALTIMORE CITY HEALTH DEPARTMENT

BALTIMORE HEALTH SURVEY

MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

1961

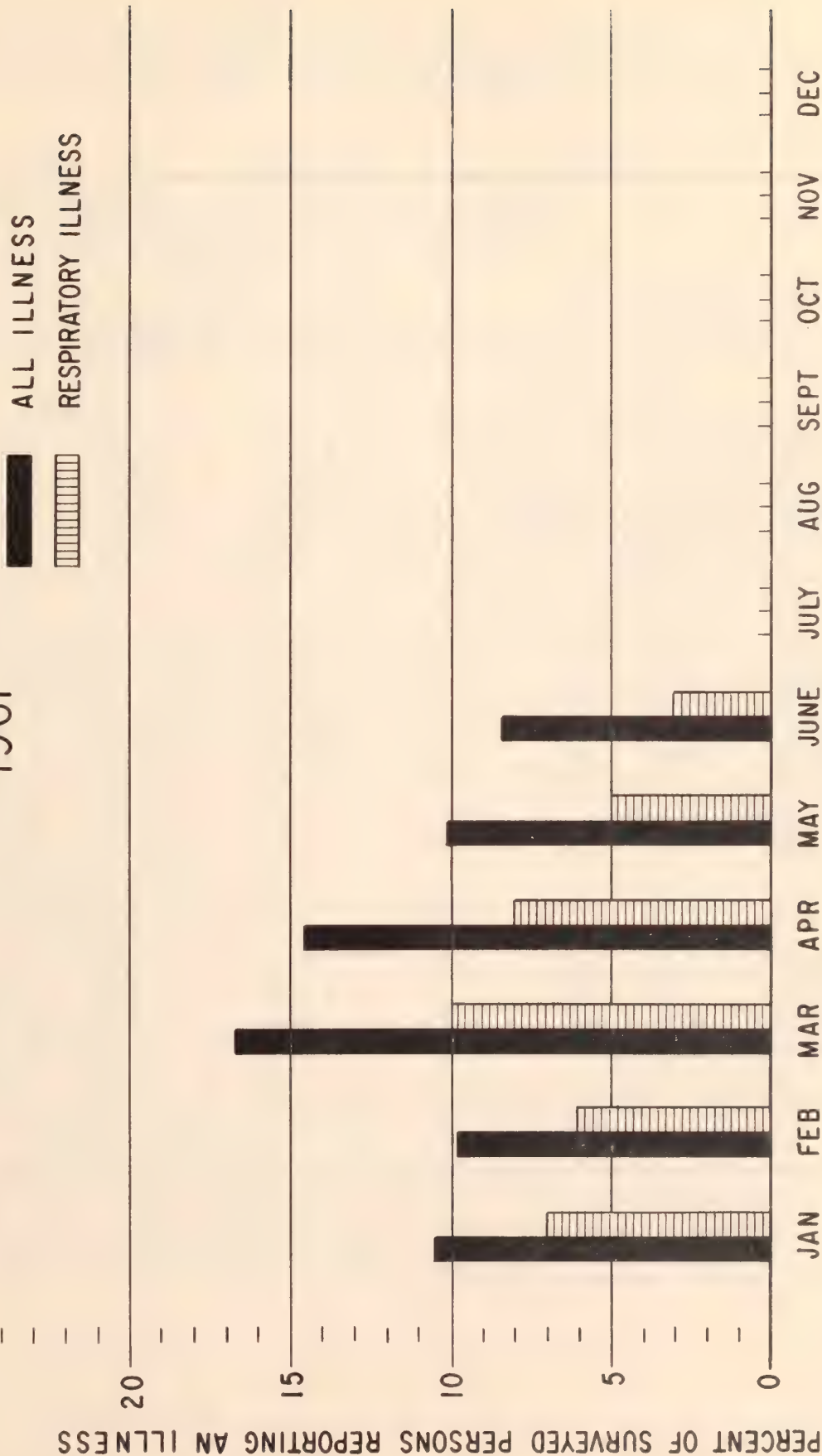


Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: First Quarter, 1961 and 1958-1960

Vital Event	JANUARY - MARCH			
	Number		Rate*	
	1961	Average 1958-60	1961	Average 1958-60
	All Races			
Marriages recorded.....	1,722	1,984	7.4	8.6
Births.....	5,669	5,956	24.5	25.7
Deaths, all causes.....	3,025	3,219	13.1	13.9
Deaths, under one year.....	204	203	36.0	34.1
under 28 days.....	145	137	25.6	23.0
28 days-11 months.....	59	66	10.4	11.1
White				
Marriages recorded.....	1,056	1,203	7.0	7.9
Births.....	2,920	3,168	19.4	20.7
Deaths, all causes.....	2,087	2,284	13.9	14.9
Deaths, under one year.....	71	86	24.3	27.1
under 28 days.....	47	60	16.1	18.9
28 days-11 months.....	24	26	8.2	8.2
Nonwhite				
Marriages recorded.....	666	781	8.2	9.9
Births.....	2,749	2,788	33.9	35.4
Deaths, all causes.....	938	935	11.6	11.9
Deaths, under one year.....	133	117	48.4	42.0
under 28 days.....	98	77	35.6	27.6
28 days-11 months.....	35	40	12.8	14.4

*Infant mortality rates are per 1,000 live births. All other rates—marriage, birth and death—are on an annual basis per 1,000 population estimated as of July 1, 1960—total population 939,000; white, 610,000; nonwhite, 329,000.

Table II

Resident Deaths From Selected Causes
First Quarter, 1961 and 1958-1960

Cause of Death	JANUARY - MARCH			
	Number		Rate Per 100,000*	
	1961	Average 1958-60	1961	Average 1958-60
All Causes.....	3,025	3,231	13.1	13.9
Tuberculosis (001-019).....	40	50	17.3	21.6
Syphilis (020-029).....	10	9	4.3	3.9
Cancer (140-205).....	472	476	203.9	205.4
Diabetes mellitus (260).....	63	67	27.2	28.9
Vascular lesions of the central nervous system (330-334).....	233	256	100.6	110.4
Diseases of the heart (410-443).....	1,320	1,402	570.1	604.9
Influenza and pneumonia (480-483, 490-493).....	122	172	52.7	74.2
Nephritis and nephrosis (590-594).....	23	26	9.9	11.2
Puerperal causes (640-652, 670-689).....	2	4	.9	1.7
Congenital malformations (750-759).....	45	30	19.4	12.9
Certain diseases of early infancy (760-776).....	129	130	55.7	56.1
Suicides (963, 970-979).....	19	25	8.2	10.8
Homicides (964, 980-999).....	29	22	12.5	9.5
Accidents (800-802, 810-835, 840-962)...	104	95	44.9	41.0
Motor vehicles (810-835).....	22	33	9.5	14.2

*Rates shown for all causes are per 1,000 population.

TABLE III
CASES AND DEATHS FROM SELECTED CAUSES AND INFANT DEATHS BY HEALTH DISTRICTS
FIRST QUARTER 1961 and 1958-1960 AVERAGE

Cause of Illness and Death	*TOTAL CITY		EASTERN		WESTERN		DRUID		SOUTHEASTERN		SOUTHERN	
	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60
Infant deaths	204	199	57	62	53	44	31	49	22	24	35	19
Tuberculosis all forms	184 39	213 50	51 4	64 16	40 17	52 11	48 9	50 10	26 1	28 8	19 4	19 5
Syphilis	367 10	329 10	96 2	83 2	99 1	92 3	111 5	107 4	32 1	22 0	24 0	19 0
Typhoid fever	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Diphtheria	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Whooping cough	18 0	8 0	2 0	2 0	7 0	2 0	6 0	2 0	3 0	1 0	0 0	1 0
Meningococcal infections	3 1	8 3	1 0	2 1	1 0	2 1	1 1	1 1	0 0	0 0	0 0	3 0
Measles	573 0	1,339 13	196 0	410 03	52 0	250 03	168 0	391 03	150 0	212 0	6 1	76 03
Acute polio- myelitis (paralytic)	0 1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 1	0 0

All figures corrected for residence within Maryland.

*Totals include some transfers allocated to Baltimore City but not otherwise allocated to Health Districts.

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths, Tuberculosis Hospital Admissions
and Patients Receiving Chemotherapy
First Quarter 1961 and 1960

	JANUARY-MARCH	
	Total	
	1961	1960
Newly Reported Cases.....	180	213
White.....	85	89
Nonwhite.....	95	124
Reported After Death.....	11	12
Number of Readmissions.....	27	30
White.....	16	16
Nonwhite.....	11	14
Number of Tuberculosis Deaths.....	36	41
White.....	18	22
Nonwhite.....	18	19
Number of Patients Admitted to Tuberculosis Hospitals.....	183	238
Number of Patients on Chemotherapy.....	1,715	1,451
Started in current year.....	231	196
Started prior to current year.....	1,484	1,255

Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Second Quarter, 1961 and 1958-1960

Vital Event	APRIL - JUNE				JANUARY - JUNE	
	Number		Rate*		Rate*	
	1961	Average	1961	Average	1961	Average
		1958-60		1958-60		1958-60
All Races						
Marriages recorded.....	2,482	2,279	10.6	9.7	9.0	9.1
Births	5,591	5,525	23.9	23.6	24.2	24.6
Deaths, all causes.....	2,862	2,721	12.2	11.6	12.6	12.7
Deaths, under one year.....	179	197	32.0	35.7	34.0	34.8
under 28 days.....	145	151	25.9	27.3	25.8	25.1
28 days-11 months.....	34	46	6.1	8.4	8.2	9.7
White						
Marriages recorded.....	1,633	1,425	10.7	9.2	8.9	8.5
Births	2,898	2,953	19.1	19.1	19.2	19.9
Deaths, all causes.....	2,039	1,927	13.4	12.4	13.6	13.7
Deaths, under one year.....	81	78	28.0	26.4	26.1	26.8
under 28 days.....	65	59	22.4	20.0	19.3	19.4
28 days-11 months.....	16	19	5.6	6.4	6.8	7.4
Nonwhite						
Marriages recorded.....	849	854	10.4	10.7	9.3	10.3
Births.....	2,693	2,572	32.8	32.3	33.4	33.9
Deaths, all causes.....	823	794	10.0	10.0	10.8	10.9
Deaths, under one year.....	98	119	36.4	46.3	42.4	44.0
under 28 days.....	80	92	29.7	35.8	32.7	31.5
28 days-11 months.....	18	27	6.7	10.5	9.7	12.5

*Infant mortality rates are per 1,000 live births. All other rates—marriage, birth and death—are on an annual basis per 1,000 population estimated as of July 1, 1960—total population 939,000; white, 610,000; nonwhite, 329,000.

Table II

Resident Deaths From Selected Causes
Second Quarter, 1961 and 1958-1960

Cause of Death	APRIL - JUNE				JANUARY - JUNE	
	Number		Rate Per 100,000*		Rate Per 100,000*	
	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60
All Causes.....	2,862	2,734	12.2	11.7	12.6	12.7
tuberculosis (001-019).....	44	41	18.8	17.5	18.0	19.5
syphilis (020-029).....	7	9	3.0	3.8	3.7	3.9
cancer (140-205).....	491	457	209.7	195.0	206.8	200.4
diabetes mellitus (260).....	74	59	31.6	25.2	29.4	21.0
vascular lesions of the central nervous system (330-334)...	202	204	86.3	87.0	93.1	98.7
diseases of the heart (410-443).....	1,184	1,120	505.8	477.9	537.8	540.8
influenza and pneumonia (480-483, 490-493).....	87	87	37.2	37.1	44.9	55.6
nephritis and nephrosis (590-594).....	27	22	11.5	9.4	10.7	10.3
unspecified causes (640-652, 670-689).....	2	1	0.9	0.1	0.9	1.1
congenital malformations (750-759).....	39	33	16.7	14.7	18.0	17.3
certain diseases of early infancy (760-776).....	126	137	53.8	58.5	54.8	57.3
homicides (963, 970-979).....	26	21	11.1	9.0	9.7	9.9
omicides (964, 980-999).....	16	26	6.8	11.1	9.7	10.3
accidents (800-802, 810-835, 840-962).....	107	121	45.7	51.6	45.3	46.3
motor vehicles (810-835).....	35	18	15.0	16.2	12.2	15.2

*Rates shown for all causes are per 1,000 population.

TABLE III

CASES AND DEATHS FROM SELECTED CAUSES AND INFANT DEATHS BY HEALTH DISTRICTS
SECOND QUARTER 1961 and 1958-1960 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Western		Druid		Southeastern		Southern	
	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60
Infant deaths	179	203	49	61	42	48	47	46	19	25	17	23
Tuberculosis Cases Deaths	217 48	243 40	63 9	64 9	56 11	60 10	43 8	62 9	38 12	37 7	16 1	20 5
Syphilis Cases Deaths	367 7	415 9	107 2	99 3	89 1	113 1	118 2	142 3	27 1	33 2	11 0	22 0
Typhoid fever Cases Deaths	0 0	0.3 0	0 0	0 0	0 0	0.3 0	0 0	0 0	0 0	0 0	0 0	0 0
Diphtheria Cases Deaths	0 0	0.3 0.3	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0.3 0.3	0 0	0 0
Whooping cough Cases Deaths	20 0	11 0	6 0	4 0	12 0	1 0	0 0	3 0	2 0	3 0	0 0	0 0
Meningococcal infections Cases Deaths	4 2	5 1	1 1	0.7 0.3	0 0	1.3 0.3	1 0	1.3 0	2 1	0.3 0.3	0 0	1.3 0
Measles Cases Deaths	1069 0	733 0.6	430 0	257 0	149 0	136 0	251 0	192 0.3	150 0	103 0	88 0	45 0.3
Acute polio- myelitis (paralytic) Cases Deaths	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

All figures corrected for residence within Maryland.

*Totals include some intransfers allocated to Baltimore City but not otherwise allocated to Health Districts.

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths and Tuberculosis Hospital Admissions
Second Quarter and Semi-Annual 1961 and 1960

	APRIL-JUNE		JANUARY-JUNE	
	Total		Total	
	1961	1960	1961	1960
Newly Reported Cases.....	210	215	390	428
White.....	100	75	185	165
Nonwhite.....	110	140	205	263
Reported After Death.....	15	10	26	22
Number of Readmissions.....	39	21	66	51
White.....	22	12	38	28
Nonwhite.....	17	9	28	23
Number of Tuberculosis Deaths.....	42	40	78	81
White.....	23	25	41	47
Nonwhite.....	19	15	37	34
Number of Patients Admitted to Tuberculosis Hospitals.....	211	187	394	425
Number of Patients on Chemotherapy.....	1,878		1,582	
Started in current year.....	435		448	
Started prior to current year.....	1,443		1,134	

Dental Caries in Baltimore School Children
After Seven Years of Fluoridation of the Public Water Supply*

The control of dental disease in a population demands repeated study of the epidemiology of dental caries in that population. Accordingly, three surveys of tooth decay have been conducted in recent years by the Baltimore City Health Department among the city's school children. The first, in March 1952, yielded broad estimates of decay experience in 12,000 public and parochial school children aged 5 through 18 years.¹ The second, conducted between March 15 and May 19, 1955, confirmed the validity of the 1952 findings and delineated the influence of biosocial determinants of dental caries such as age, sex, race and socio-economic status, and the preventive role of oral hygiene.²

In view of a program of fluoridation of the Baltimore City Water Supply inaugurated November 26, 1952, a third dental survey, the subject of the present report, was conducted between March 17 and May 19, 1960. This was designed to provide data for comparison with those obtained in the 1955 survey for the purpose of eliciting the effect of fluoridation on the tooth decay experience of school children. At the time of the survey, a full seven years had elapsed during which the fluoride concentration in the public water supply had been maintained at the one part per million level with but a few short interruptions occasioned by temporary unavailability of hydrofluosilicic acid (H_2SiF_6), the chemical fluoridating agent.³

Plan and Procedure

As in the 1955 survey, the primary sampling units were elementary public schools with an October (1959) enrollment of 300 or more children of the same race. Schools with predominately white enrollments were stratified in five socio-economic groups² and three schools from each selected at random, that is, fifteen schools with enrollments of white children were selected to be surveyed. In the case of nonwhite

* By H. Berton McCauley, D.D.S., Todd M. Frazier, Sc.M. and L. Paul Rivas, D.D.S.
Bureau of Dental Care and Bureau of Biostatistics, Baltimore City Health Department,
Baltimore, Maryland, 1960.

children, socio-economic grading was not practicable and six schools with predominantly nonwhite enrollments were randomly selected for survey to obtain a representative sample of Negro children.

Inspections

Inspections of the teeth were confined to all available children in the selected schools whose age last birthday was six, eight, or ten years. They were performed by the same dentist who made them in the 1955 survey (Dr. L. Paul Rives), using the same method of mirror, explorer and the best available illumination. The data obtained were the number of permanent teeth erupted, decayed, filled, decayed and filled, indicated for extraction, and extracted. Eliminating the number of erupted teeth, the sum of these mutually exclusive elements comprised the caries experience (DMF) score for the child. By means of a form submitted to parents in advance of the survey, it was possible to obtain information regarding the date and place of birth of each child and a history of residence in Baltimore (Figure 1). Children whose histories indicated that they were born elsewhere, or were away from the city or its immediate environs more than six months, are excluded from this study.

Results

The findings of the 1960 survey are presented and compared with the 1955 data in Table 1. The per cent of six, eight and ten-year-old children, white and Negro, male and female, who experienced a caries attack in permanent teeth was less in 1960 than in 1955. Parallel reductions were observed in the mean number of caries attacked (DMF) permanent teeth per 100 permanent teeth erupted and in the mean number of DMF permanent teeth per child. Regardless of the measure or expression of decay activity employed, the 1960 decrease in caries experience assumed a characteristic pattern in which the greatest reductions were observed in six-year-old youngsters and lesser reductions in eight and ten-year-old children.

Figure 1

(1-4)

BALTIMORE CITY HEALTH DEPARTMENT
BUREAU OF DENTAL CARE

PARENT'S CONSENT FOR DENTAL EXAMINATION

Dear Parent:

The Health Department is making a study of tooth decay in school children and would like to examine your child's teeth. It would be appreciated if you would fill out, sign and return this form to the school.

Child's Name _____ (5) Sex _____ (6-8) School _____

Room Number _____ Grade _____ Address _____

(9) Age Last Birthday _____ Date of Birth _____ Birth Place _____

_____ (10) Child has lived in Baltimore _____ years.

I hereby consent to the examination of my child's teeth by a Health Department Dentist.

Date _____

Signature _____
Parent or Guardian

DC-27A

FOR DENTISTS USE

Survey Findings

PERMANENT TEETH

(11) 1 2

P _____

V _____

NUMBER OF PERMANENT TEETH N	DECAYED ONLY D	FILLED ONLY F	DECAYED AND FILLED DF	EXTRACTED M	EXTRACTION INDICATED E	TOTAL DEMF
(12-13)	(14)	(15)	(16)	(17)	(18)	(19-20)

TABLE 1

Caries Experience in Permanent Teeth; White and Negro
Children 6, 8, and 10 Years of Age
Baltimore, 1955 and 1960

	Age Last Birthday	Number of Children		Per Cent Having One or More DMF Permanent Teeth		Mean Number of Erupted Permanent Teeth		Mean Number of DMF Teeth Per 100 Teeth Erupted		Mean Number of DMF Teeth Per Child	
		1955	1960*	1955	1960	1955	1960	1955	1960	1955	1960
WHITE Boys	6	300	239	43	11	5.1	4.2	20.4	4.5	1.1	0.2
	8	300	271	88	54	11.0	11.4	27.4	11.2	3.0	1.3
	10	300	229	98	82	16.9	16.5	24.5	16.5	4.1	2.7
Girls	6	300	245	50	19	5.7	4.9	21.1	7.0	1.2	0.3
	8	300	242	91	60	12.2	11.8	26.6	14.5	3.2	1.7
	10	300	268	99	90	18.7	18.6	24.6	17.3	4.6	3.2
NEGRO Boys	6	120	99	50	20	6.3	5.9	19.1	7.1	1.2	0.4
	8	120	102	87	48	11.6	11.4	26.1	12.1	3.0	1.4
	10	120	82	99	85	18.5	18.0	25.2	15.8	4.7	2.9
Girls	6	120	113	54	29	6.6	7.5	21.3	8.8	1.4	0.7
	8	120	143	96	65	12.7	12.7	27.7	14.1	3.5	1.8
	10	120	106	96	88	20.6	19.9	21.8	15.8	4.6	3.1

*1960 sample consists of life time residents of Baltimore City

These decreases in dental caries experience are further illustrated and measured in Table 2, wherein all the children represented in Table 1, regardless of race and sex, are combined into the three age groups for further comparison of 1955 and 1960 results. Expressed in per cent of children with a decay experience, the caries reductions approximate 62 per cent at six years of age, 37 per cent at eight and 12 per cent at ten. Using quantitative indices, expressed in the number of DMF teeth observed, the percentage reductions are even greater: 67, 52 and 31 in DMF permanent teeth per 100 erupted and 68, 53 and 32 in DMF permanent teeth per child.

Such gradients in tooth decay reductions are logical inasmuch as it is apparent that fluoridated drinking water, for the most part, confers resistance to the disease by virtue of exposure to the fluoride bearing water during the period of tooth formation and calcification, which, in the case of the permanent teeth extends from six months in utero to the eighth or tenth year of age. Since at the time of the 1960 survey there was a full seven years of fluoridation in Baltimore, the six-year-old children had developed whatever permanent teeth they possessed under the full impact of fluoride water, and therefore exhibited maximum caries reduction.

Obviously, the permanent teeth of eight and ten-year-old youngsters were formed under progressively diminished influence of the fluoride treated water, which fact is reflected in the observed smaller decreases in decay prevalence at those ages. Nevertheless, as exposure to fluoride treated water extends into future years, maximum caries reductions may be anticipated in children of eight years, ten years and older, because in the course of time they will be, as the six-year-old children are now, exposed to the fluoridated water throughout the developmental period of their teeth.

There is ample evidence for these findings and for anticipated fluoridation effects in the published reports of similar studies of dental caries in populations under the influence of fluoridation programs in Grand Rapids, (Mich.),^{4,5} Newburgh, (N.Y.),^{6,7} Brantford, (Ont.),⁸ Evanston, (Ill.),⁹ and elsewhere.¹⁰ The implications

Table 2

Reductions in Caries Experience in Life Resident School Children 6, 8 and 10 Years of Age
Following Seven Years of Fluoridation of the Public Water Supply, Baltimore - 1960

Age Last Birthday	Survey	Number Children Surveyed	Per Cent Children with Decay Experience	Reduction	Per cent Reduction	DMF Per- manent Teeth per 100 Erupted	Differ- ence	Per cent Reduction	DMF Per- manent Teeth per Child	Difference	Per Cent Reduction
6	1955	840	48			20.6			1.2		
	1960	696	18	-30	62	6.7	-13.9	67	0.4	-0.8	68
8	1955	840	90			27.0			3.2		
	1960	758	57	-33	37	13.0	-14.0	52	1.5	-1.7	53
10	1955	840	98			24.2			4.4		
	1960	685	86	-12	12	16.6	-7.6	31	3.0	-1.4	32

of the cost of clinical treatment contrasted with the observed magnitude of prevention^{11,12} are considerable.

Safety of Fluoridation

It is of interest to note that not one case of enamel hypoplasia evidenced by mottling or discoloration of the dental surface was observed in the course of the 1960 survey. Further, that after seven years of fluoridation of the public water supply of Baltimore, a water system serving 1.5 million people, there has yet to be received a complaint of effects, attributable to fluoride in the water, of damage to health, plumbing or commercial processes with the possible exception of ice manufacture, and this was rectified by a simple change in the process of core pumping.

Summary

In a 1960 dental survey of 2,139 Baltimore school children six, eight, and ten years of age, it was found that fluoridation of the public water supply had yielded reductions in respective age-specific tooth decay experience of approximately 70, 50 and 30 per cent since 1955.

The authors acknowledge with gratitude the willing helpfulness of administrators, principals, teachers, parents and children of the Baltimore Public Schools, without whom this study would not have been possible; and in particular, the prodigious efforts of Mrs. Florence S. Whitney, research assistant in the Bureau of Biostatistics.

Bibliography

1. McCauley, H. B. and Frazier, T. M. The 1952 dental survey in Baltimore, Maryland. Quarterly Statistical Report of the Baltimore City Health Department, October 26, 1954, Vol. 6, No. 1, pp. 3-18.
2. McCauley, H. B. and Frazier, T. M. Dental caries and dental care needs in Baltimore school children (1955). Quarterly Statistical Report of the Baltimore City Health Department, August 16, 1957, Vol. 9, No. 2, pp. 10-19. Also Journal of Dental Research, August, 1957, Vol. 36, No. 4, pp. 546-551.
3. Hopkins, E. S. How Baltimore fluoridates. Water and Sewage Works, November, 1954, Vol. 101, pp. 473-476.
4. Arnold, F. A.; Dean, H. T. and Knutson, J. W. Effect of fluoridated public water supplies on dental caries prevalence. Seventh year of the Grand Rapids-Muskegon study. Public Health Reports, February, 1955, Vol. 68, pp. 141-148.
5. Arnold, F. A.; Dean, H. T.; Jay, P. and Knutson, J. W. Tenth year of the Grand Rapids-Muskegon study. Public Health Reports, July, 1956, Vol. 71, pp. 652-658.
6. Ast, D. B.; Bushel, A.; Wachs, B. and Chase, H. C. Newburgh-Kingston caries-fluorine study. Combined clinical and roentgenographic dental findings after eight years of fluoride experience. Journal of the American Dental Association, June, 1955, Vol. 50, pp. 680-685.
7. Ast, D. B.; Smith, D. J.; Wachs, B. and Cantwell, K. T. Newburgh-Kingston caries-fluorine study. Combined clinical and roentgenographic dental findings after ten years of fluoride experience. Journal of the American Dental Association, March, 1956, Vol. 52, pp. 314-325.
8. Hutton, W. L.; Linscott, B. W. and Williams, D. B. Final report of local studies on water fluoridation in Brantford. Canadian Journal of Public Health, March, 1956, Vol. 47, pp. 89-92.
9. Hill, I. D.; Blayney, J. R. and Wolf, W. The Evanston dental caries study. The caries experience rates of 12, 13, and 14-year-old children after exposure to fluoridated water for 59 to 70 months. Journal of Dental Research, February, 1955, Vol. 34, pp. 77-88.
10. Dean, H. T. Fluorine in the control of dental caries. Journal of the American Dental Association, January, 1956, Vol. 52, pp. 1-8.
11. Williams, H. Dental dividends from fluoridation. Baltimore Health News, September, 1960, Vol. 37, pp. 69-70.
12. Williams, H. and Daley, Sir Allen. Public health practice - An ounce of prevention is worth a pound of cure. Baltimore Health News, June-July, 1956, Vol. 33, pp. 53-54.



BALTIMORE CITY HEALTH DEPARTMENT
RESEARCH AND PLANNING SECTION

QUARTERLY

STATISTICAL

REPORT

BIRTHS

MARRIAGES

MORBIDITY

MORTALITY

University of Maryland Library
College Park, Md.

THIRD QUARTER - 1961

JANUARY 25, 1962 Vol. 13 No. 3

Maryland Room
University of Maryland Library
College Park, Md.

BALTIMORE CITY HEALTH DEPARTMENT

HUNTINGTON WILLIAMS, M.D.
Commissioner

RESEARCH AND PLANNING SECTION

MATTHEW TAYBACK, Sc.D.
Assistant Commissioner of Health

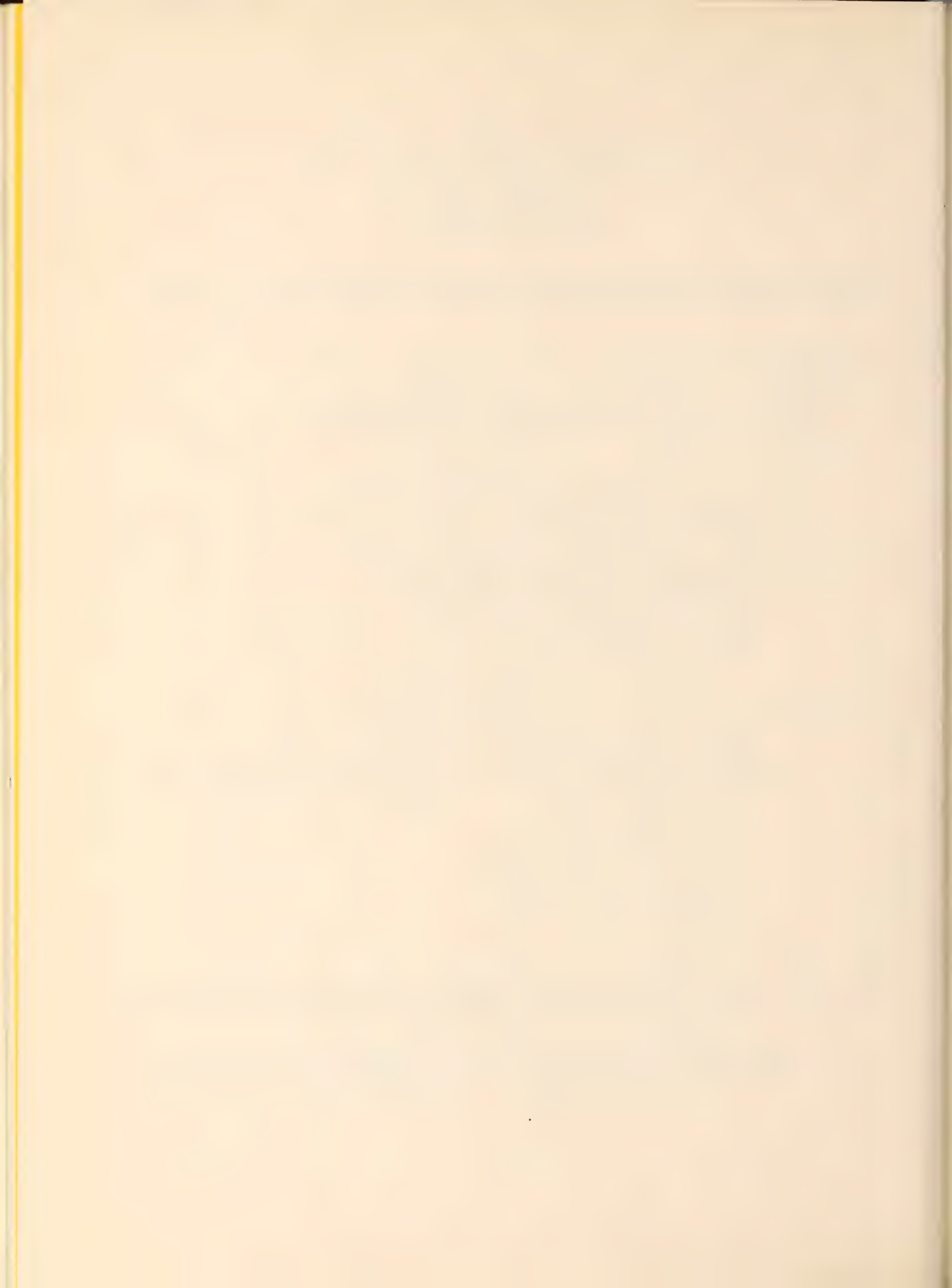
"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation."

Quetelet

Inquiries concerning the materials published, should be addressed to Mr. Todd M. Frazier, Director, Bureau of Biostatistics, Baltimore City Health Department, Baltimore 3, Maryland.

Table of Contents

	Page
A Summary of Vital Events	1 - 2
B Annual Rates by Month for Births and Selected Causes of Death	3
C Tables of Vital Events	4 - 7
I Marriages, Births, Deaths by Race	4
II Deaths From Selected Causes	5
III Cases and Deaths From Selected Causes and Infant Deaths by Health District	6
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths, Tuberculosis Hospital Admissions and Patients on Chemotherapy	7
D Births, Deaths and Cases by Health District, 1960	8 - 22
Eastern Health District	8 - 10
Western Health District	11 - 13
Druid Health District	14 - 16
Southeastern Health District	17 - 19
Southern Health District	20 - 22
E Population Estimate, Baltimore, Maryland - July 1, 1961	23 - 27



Vital Events - Baltimore, Maryland
July-September, 1961

Marriages and Births

In the months July-September, 1961 a total of 2,452 marriages were recorded in Baltimore City, a figure slightly lower than the average of 2,594 for these months in the years 1958-1960. The number of marriages recorded for white residents remained constant but the number among Negro residents decreased from an average of 968 in 1958-1960 to 827 in 1961.

Births reported during the third quarter of 1961 numbered 6,155 compared to an average of 6,349 for 1958-1960. Decreases in the number of births were noted in both the white and nonwhite resident population. The numbers of births per 1,000 population for the year to date are 24.8 total, 21.6 white, 33.1 nonwhite. The non-white birth rate of 33.1 in 1961 represents a marked drop from the 1958-1960 level of 35.1. Nonwhite births for the months January-September, 1961 represented 47.6 per cent of total resident births compared to 49.3 per cent for the same period in 1960.

Mortality

The mortality rates for July-September, 1961 (Table II) were slightly higher than for the 1958-1960 comparison period. For this year to date, however, the total death rate was 12.3 compared to an average of 12.1 for 1958-1960. Deaths ascribed to influenza and pneumonia and to motor vehicle accidents show a decrease in 1961 compared to the previous three years. Heart disease and cancer deaths show a compensating increase.

The 1961 infant mortality rate and its components, neonatal and post neonatal deaths, show a consistent decline from 1958-1960 levels for the first three quarters of the year. Specifically the 1961 January-September infant mortality rate was 32.3, a decrease of 5 per cent from the 1958-1961 rate of 34.1. During the first nine months of 1961, seven maternal deaths were reported compared to an average

of eight in the years 1958-1960. Three of these seven maternal deaths occurred during the third quarter of 1961.

Morbidity

Total morbidity and respiratory illnesses experience obtained from the Baltimore Health Survey showed a decrease during the months July-September compared to the first six months of the year. The following table based on the results of monthly surveys of 100 randomly selected homes indicates that 1961 has been a year remarkably free from severe respiratory illness outbreaks in the community.

Per Cent Reported Ill with Acute Respiratory Disease
By Month, 1960 and 1961
Baltimore City

	1960	1961		1960	1961
January	10	7	June	5	3
February	14	6	July	Not Available	3
March	15	10	August	4	2
April	7	8	September	5	3
May	4	5			

Newly reported cases of tuberculosis declined from 632 in January-September 1960 to 577 in the same period of 1961, a decrease of 8.4 per cent. Readmissions during the same period have increased from 68 in 1960 to 98 in 1961. Table IV shows that in the first nine months of 1961 tuberculosis admissions were down nearly 7 per cent from 1960.

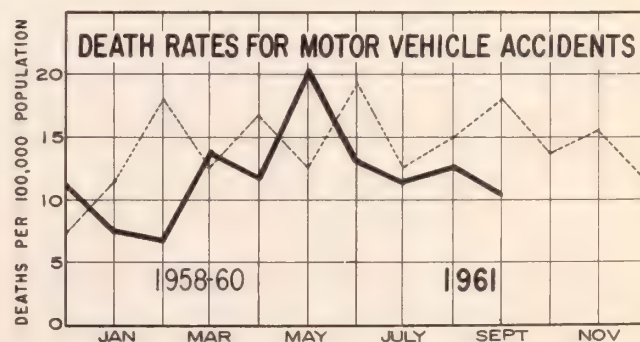
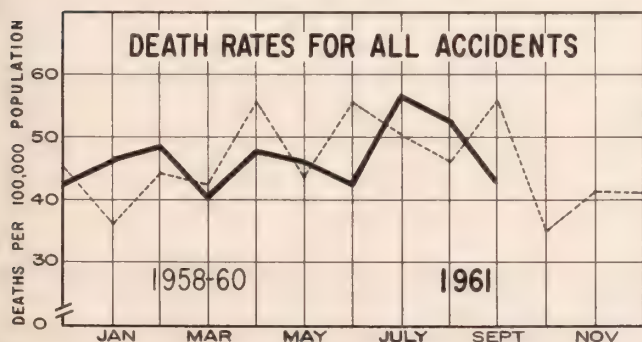
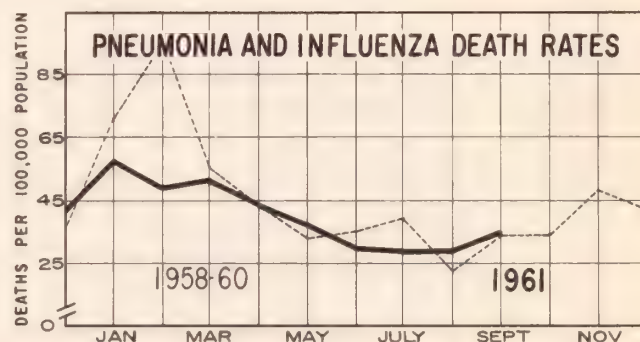
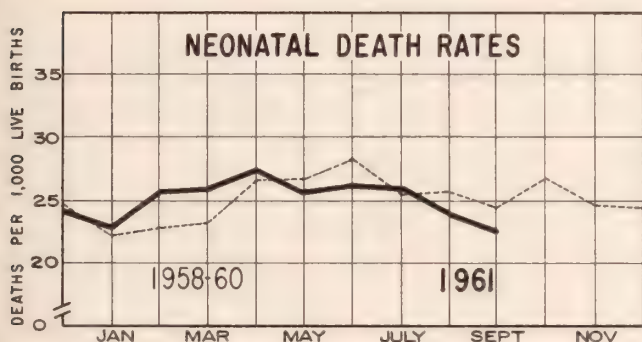
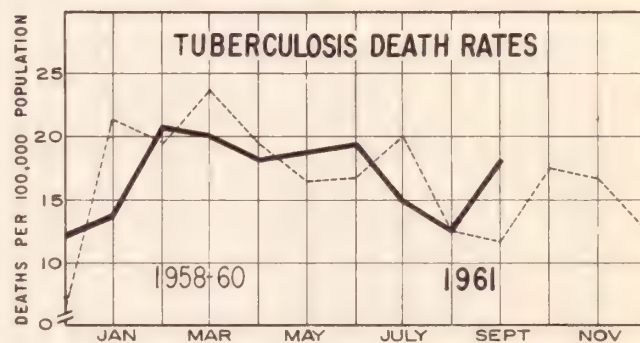
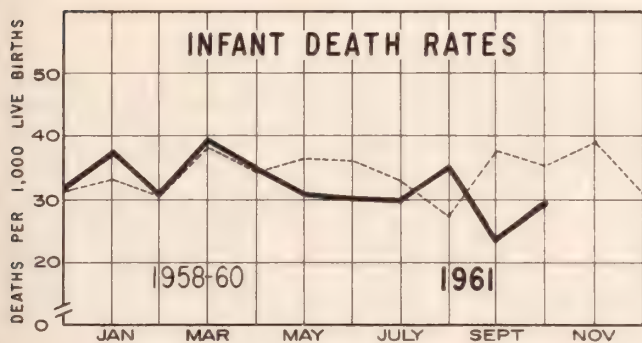
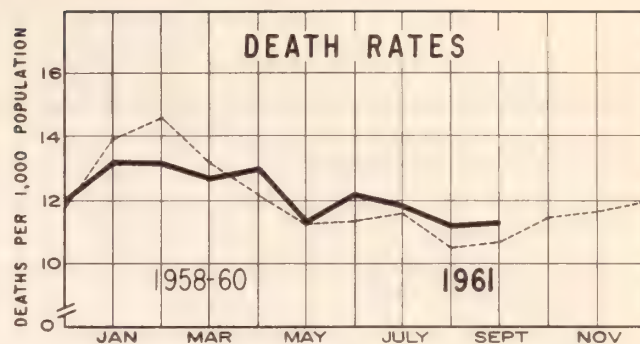
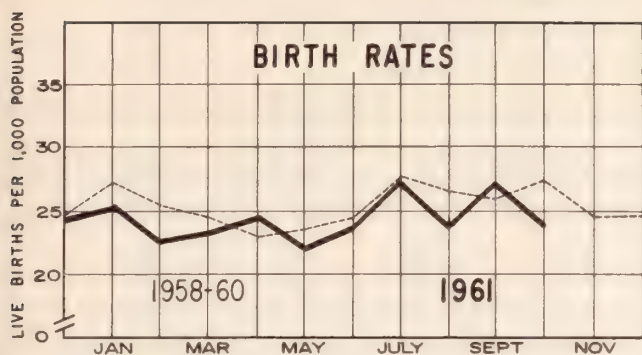


Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Third Quarter, 1961 and 1958-1960

Vital Event	JULY - SEPTEMBER				JANUARY - SEPTEMBER	
	Number		Rate*		Rate*	
	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60
	All Races					
Marriages Recorded.....	2,452	2,594	10.4	10.9	9.5	9.8
Births.....	6,155	6,349	26.1	26.8	24.8	25.4
Deaths, all causes.....	2,712	2,593	11.5	10.9	12.3	12.1
Deaths, under one year.....	180	208	29.2	32.8	32.3	34.1
under 28 days.....	143	163	23.2	25.7	24.9	25.3
28 days-11 months....	37	45	6.0	7.1	7.4	8.8
White						
Marriages Recorded.....	1,625	1,626	10.8	10.4	10.3	9.2
Births.....	3,222	3,340	21.3	21.3	21.6	20.4
Deaths, all causes.....	1,871	1,819	12.4	11.6	14.3	13.0
Deaths, under one year.....	71	84	22.0	25.1	24.7	26.2
under 28 days.....	56	65	17.4	19.5	18.6	19.4
28 days-11 months....	15	19	4.6	5.6	6.1	6.8
Nonwhite						
Marriages Recorded.....	827	968	9.7	12.0	9.3	10.9
Births.....	2,933	3,009	34.4	37.4	33.1	35.1
Deaths, all causes.....	841	774	9.9	9.6	10.3	10.5
Deaths, under one year.....	109	124	37.2	41.2	40.6	43.0
under 28 days.....	87	98	29.7	32.6	31.6	31.9
28 days-11 months....	22	26	7.5	8.6	9.0	11.1

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1961 total population 937,000; white 599,000; nonwhite 338,000. Population for period 1958-1960 was taken as the average mid year population for the three years as adjusted from the 1960 U.S. Census, i.e., total population 940,000; white 621,000; nonwhite 319,000.

Table II

Resident Deaths From Selected Causes
Third Quarter, 1961 and 1958-1960

Cause of Death	JULY - SEPTEMBER				JANUARY - SEPTEMBER	
	Number		Rate Per 100,000*		Rate Per 100,000*	
	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60
All Causes	2,712	2,593	11.5	10.9	12.3	12.1
Tuberculosis (001-019).....	36	34	15.2	14.3	17.1	17.9
Syphilis (020-029).....	4	9	1.7	3.8	3.0	3.7
Cancer (140-205).....	511	463	216.4	195.4	210.3	198.6
Diabetes mellitus (260).....	51	50	21.6	21.1	26.8	24.9
Vascular lesions of the central nervous system (330-334).....	218	199	92.3	84.0	93.2	93.7
Diseases of the heart (410-443)...	1,120	1,036	474.2	437.3	517.1	506.1
Influenza and pneumonia (480-483, 490-493).....	69	75	29.2	31.7	39.7	47.4
Nephritis and nephrosis (590-594).	14	20	5.9	8.4	9.1	9.7
Puerperal causes (640-652, 670-689).....	3	3	1.3	1.3	1.0	1.1
Congenital malformations (750-759)	27	38	11.4	16.0	15.8	14.4
Certain diseases of early infancy (760-776).....	130*	145	55.0	61.2	54.9	58.6
Suicides (963, 970-979).....	26	22	11.0	9.3	10.1	9.8
Homicides (964, 980-999).....	18	31	7.6	13.1	9.0	11.2
Accidents (800-802, 810-835, 840-962).....	110	119	46.6	50.2	45.8	47.6
Motor vehicles (810-835).....	27	35	11.4	14.8	12.0	15.1

*Rates shown for all causes are per 1,000 population

Table III
CASES AND DEATHS FROM SELECTED CAUSES AND INFANT DEATHS BY HEALTH DISTRICTS
THIRD QUARTER, 1961 and 1958-1960 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Western		Druid		Southeastern		Southern	
	1961	AVERAGE 1958-60	1961	AVERAGE 1958-60	1961	AVERAGE 1958-60	1961	AVERAGE 1958-60	1961	AVERAGE 1958-60	1961	AVERAGE 1958-60
Infant deaths	180	202	52	54	46	51	44	53	24	25	12	18
Tuberculosis Cases	190	204	68	57	37	51	47	48	24	27	14	20
all forms Deaths	32	33	11	8	5	7	6	7	3	7	2	3
Typhoid Cases	0	1.7	0	0.7	0	0.3	0	0	0	0	0	0.7
fever Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria Cases	0	0	0	0	0	0	0	0	0	0	0	0
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Whooping Cases	18	34	4	10	1	10	5	9	7	4	1	1
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Meningo- Cases	2	2	0	0.7	1	0.3	1	0	0	0.7	0	0.3
Deaths	0	0.3	0	0.3	0	0	0	0	0	0	0	0
infections												
Measles Cases	195	139	83	29	33	22	34	52	28	21	16	15
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Acute polio- Cases	1	19	0	6	0	8	0	1	1	3	0	1
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
(paralytic)												
Syphilis Cases	337	384	111	96	72	101	119	139	17	23	13	17
Deaths	5	9	1	1.7	1	2.3	2	2.3	0	2.3	0	0.3

All figures corrected for residence within Maryland.

*Totals include some intrastate transfers allocated to Baltimore City but not otherwise allocated to health districts.

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths, Tuberculosis Hospital Admissions
and Patients on Chemotherapy
Third Quarter, 1961 and 1960

	JULY - SEPTEMBER		JANUARY - SEPTEMBER	
	Total		Total	
	1961	1960	1961	1960
Newly Reported Cases.....	188	204	577	632
White.....	68	78	253	243
Nonwhite.....	119	126	324	389
Reported After Death.....	7	8	33	30
Number of Readmissions.....	32	17	98	68
White.....	13	8	51	36
Nonwhite.....	19	9	47	32
Number of Tuberculosis Deaths.....	24	25	102	106
White.....	12	11	53	58
Nonwhite.....	12	14	49	48
Number of Patients Admitted to Tuberculosis Hospitals.....	189	201	583	626
Number of Patients on Chemotherapy September 30.....	1,845		1,595	
Started in current year.....	634		584	
Started prior to current year.....	1,211		1,011	

Table 1

Resident Births
Eastern Health District, 1960

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	7,486	3,843	3,643
Hospital.....	7,358	3,825	3,533
Home.....	128	18	110
Private Physician.....	93	15	78
Midwife.....	19	1	18
Other.....	16	2	14

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Eastern Health District, 1960

Cause of Death	Total	White	Nonwhite
All Causes.....	3,734	2,859	875
Tuberculosis, all forms (001-019).....	41	26	15
Respiratory tuberculosis (001-008).....	39	26	13
Syphilis (020-029).....	9	1	8
Dysentery (045-048).....	2	..	2
Meningococcal infections (057).....	2	2	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	5	1	4
Encephalitis (082-083).....	..	..	..
Other infective and parasitic diseases (110-138).....	3	1	2
Malignant neoplasms (140-205).....	648	508	140
Lymphatic and hematopoietic (200-205).....	48	38	10
Benign and unspecified neoplasms (210-239).. <td>18</td> <td>15</td> <td>3</td>	18	15	3
Diabetes (260).....	67	50	17
Anemias (290-293).....	5	4	1
Other diseases of the blood and blood- forming organs (294-299).....	4	4	..
Vascular lesions of the central nervous system (330-334).....	324	249	75
Rheumatic fever (400-402).....	1	1	..

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Eastern Health District, 1960

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	1,590	1,370	220
Chronic rheumatic heart disease (410-416).....	31	26	5
Arteriosclerotic and degenerative heart disease (420-422).....	1,241	1,117	124
Other diseases of the heart (430-434).....	36	31	5
Hypertensive heart disease (440-443).....	282	196	86
Other hypertensive diseases (444-447).....	18	11	7
Arteriosclerosis (450).....	63	56	7
Other diseases of the circulatory system (451-468).....	64	51	13
Nephritis and nephrosis (590-594).....	17	11	6
Influenza and pneumonia (480-483, 490-493)..	129	76	53
Pneumonia (490-493).....	53	52	1
Bronchitis (500-502).....	11	8	3
Ulcer of the stomach and duodenum (540-541)..	31	28	3
Appendicitis (550-553).....	5	2	3
Intestinal obstruction and hernia (560-570)..	24	17	7
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	4	4	..
Cirrhosis of the liver (581).....	52	42	10
Hyperplasia of prostate (610).....	7	5	2
Puerperal causes (640-689).....	3	1	2
Congenital malformations (750-759).....	31	19	12
Certain diseases of early infancy (760-776)..	165	55	110
Pneumonia of newborn (763).....	10	1	9
Diarrhea of newborn (764).....	..	..	..
Senility, ill-defined and unknown conditions (780-795).....	12	9	3
All other diseases.....	187	123	64
Accidents total (800-962, 965).....	128	75	53
Motor vehicle accidents (810-835).....	37	25	12
All other accidents.....	91	50	41
Suicides (963, 970-979).....	32	28	4
Homicides (964, 980-985).....	32	6	26

Table 3

Communicable Diseases Reported
Eastern Health District, 1960

Disease	Total	White	Nonwhite
Total	4,050	982	3,068
Chickenpox	286	176	110
Diphtheria .....	..	..	..
German measles	27	12	15
Gonococcal infections	1,796	75	1,721
Measles	697	154	543
Meningococcal infections	3	2	1
Mumps	383	313	70
Poliomyelitis, paralytic cases ...	35	12	23
Scarlet fever	64	48	16
Syphilis	369	63	306
Tuberculosis, all forms	232	77	155
Typhoid fever	1	1	..
Whooping cough	22	7	15
All others	135	42	93

Table 1

Resident Births
Western Health District, 1960

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	5,163	1,933	3,230
Hospital.....	5,040	1,910	3,130
Home.....	123	23	100
Private Physician.....	85	20	65
Midwife.....	31	3	28
Other.....	7	..	7

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Western Health District, 1960

Cause of Death	Total	White	Nonwhite
All Causes.....	2,369	1,522	847
Tuberculosis, all forms (001-019).....	37	20	17
Respiratory tuberculosis (001-008).....	36	20	16
Syphilis (020-029).....	4	..	4
Meningococcal infections (057).....	3	2	1
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	..	..	..
Encephalitis (082-083).....	..	..	..
Malignant neoplasms (140-205).....	359	236	123
Lymphatic and hematopoietic (200-205).....	24	20	4
Benign and unspecified neoplasms (210-239)...	19	7	12
Diabetes (260).....	68	49	19
Anemias (290-293).....	6	4	2
Other diseases of the blood and blood- forming organs (294-299).....	..	..	..
Vascular lesions of the central nervous system (330-334).....	181	105	76
Rheumatic fever (400-402).....	..	..	..

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Western Health District, 1960

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	974	699	275
Chronic rheumatic heart disease (410-416).....	22	13	9
Arteriosclerotic and degenerative heart disease (420-422).....	706	566	140
Other diseases of the heart (430-434).....	23	16	7
Hypertensive heart disease (440-443).....	223	104	119
Other hypertensive diseases (444-447).....	10	5	5
Arteriosclerosis (450).....	43	33	10
Other diseases of the circulatory system (451-468).....	33	18	15
Nephritis and nephrosis (590-594).....	17	11	6
Influenza and pneumonia (480-483, 490-493).. Pneumonia (490-493).....	75 73	40 38	35 35
Bronchitis (500-502).....	5	1	4
Ulcer of the stomach and duodenum (540-541).....	7	3	4
Appendicitis (550-553).....	2	..	2
Intestinal obstruction and hernia (560-570).....	10	5	5
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	8	3	5
Cirrhosis of the liver (581).....	43	29	14
Hyperplasia of prostate (610).....	9	8	1
Puerperal causes (640-689).....	5	..	5
Congenital malformations (750-759).....	34	14	20
Certain diseases of early infancy (760-776).. Pneumonia of newborn (763)..... Diarrhea of newborn (764).....	109 9 ..	30 6 ..	79 3 ..
Senility, ill-defined and unknown conditions (780-795).....	6	2	4
All other diseases.....	143	122	21
Accidents total (800-962, 965).....	107	51	56
Motor vehicle accidents (810-835).....	34	21	13
All other accidents.....	73	30	43
Suicides (963, 970-979).....	24	17	7
Homicides (964, 980-985).....	28	8	20

Table 3

Communicable Diseases Reported
Western Health District, 1960

Disease	Total	White	Nonwhite
Total	2,880	481	2,399
Chickenpox	84	26	58
Diphtheria .....	..	..	..
German measles	19	6	13
Gonococcal infections	1,342	72	1,270
Measles	470	115	355
Meningococcal infections	5	4	1
Mumps	199	103	96
Poliomyelitis, paralytic cases ...	25	11	14
Scarlet fever	33	19	14
Syphilis	420	40	380
Tuberculosis, all forms	187	58	129
Typhoid fever .....	..	..	..
Whooping cough	26	5	21
All others	70	22	48

Table 1

Resident Births
Druid Health District, 1960

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	4,892	1,649	3,243
Hospital.....	4,765	1,640	3,125
Home.....	127	9	118
Private Physician.....	96	7	89
Midwife.....	15	..	15
Other.....	16	2	14

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Druid Health District, 1960

Cause of Death	Total	White	Nonwhite
All Causes.....	2,842	1,499	1,343
Tuberculosis, all forms (001-019).....	38	14	24
Respiratory tuberculosis (001-008).....	37	14	23
Syphilis (020-029).....	8	1	7
Meningococcal infections (057).....	1	..	1
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	5	..	5
Encephalitis (082-083).....	..	..	..
Other infective and parasitic diseases (110-138).....	2	..	2
Malignant neoplasms (140-205).....	438	251	187
Lymphatic and hematopoietic (200-205).....	36	25	11
Benign and unspecified neoplasms (210-239).. <td>15</td> <td>8</td> <td>7</td>	15	8	7
Diabetes (260).....	56	33	23
Anemias (290-293).....	3	..	3
Other diseases of the blood and blood- forming organs (294-299).....	..	..	..
Vascular lesions of the central nervous system (330-334).....	236	115	121
Rheumatic fever (400-402).....	1	..	1

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Druid Health District, 1960

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	1,172	718	454
Chronic rheumatic heart disease (410-416).....	20	12	8
Arteriosclerotic and degenerative heart disease (420-422).....	866	611	255
Other diseases of the heart (430-434).....	28	12	16
Hypertensive heart disease (440-443).....	258	83	175
Other hypertensive diseases (444-447).....	12	1	11
Arteriosclerosis (450).....	43	22	21
Other diseases of the circulatory system (451-468).....	39	17	22
Nephritis and nephrosis (590-594).....	33	8	25
Influenza and pneumonia (480-483, 490-493)..	143	47	96
Pneumonia (490-493).....	138	45	93
Bronchitis (500-502).....	4	2	2
Ulcer of the stomach and duodenum (540-541).....	13	11	2
Appendicitis (550-553).....	3	..	3
Intestinal obstruction and hernia (560-570).....	18	12	6
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	8	4	4
Cirrhosis of the liver (581).....	48	21	27
Hyperplasia of prostate (610).....	4	2	2
Puerperal causes (640-689).....	3	..	3
Congenital malformations (750-759).....	17	6	11
Certain diseases of early infancy (760-776).....	132	27	105
Pneumonia of newborn (763).....	14	2	12
Diarrhea of newborn (764).....	..	..	..
Senility, ill-defined and unknown conditions (780-795).....	11	8	3
All other diseases.....	190	107	83
Accidents, total (800-962, 965).....	100	46	54
Motor vehicle accidents (810-835).....	36	16	20
All other accidents.....	64	30	34
Suicides (963, 970-979).....	16	12	4
Homicides (964, 980-985).....	30	6	24

Table 3

Communicable Diseases Reported
Druid Health District, 1960

Disease	Total	White	Nonwhite
Total	4,408	902	3,506
Chickenpox	186	120	66
Diphtheria .....	..	..	..
German measles	15	8	7
Gonococcal infections	2,424	138	2,286
Measles	574	244	330
Meningococcal infections	2	..	2
Mumps	311	232	79
Poliomyelitis, paralytic cases ...	9	2	7
Scarlet fever	35	25	10
Syphilis	547	64	483
Tuberculosis, all forms	209	51	158
Typhoid fever .....	..	..	..
Whooping cough	15	4	11
All others	81	14	67

Table 1

Resident Births
Southeastern Health District, 1960

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	3,477	3,133	344
Hospital.....	3,443	3,111	332
Home.....	34	22	12
Private Physician.....	24	17	7
Midwife.....	5	3	2
Other.....	5	2	3

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southeastern Health District, 1960

Cause of Death	Total	White	Nonwhite
All Causes.....	1,658	1,517	141
Tuberculosis, all forms (001-019).....	20	18	2
Respiratory tuberculosis (001-008).....	20	18	2
Syphilis (020-029).....	5	3	2
Dysentery (045-048).....	..	..	..
Meningococcal infections (057).....	..	..	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	3	2	1
Encephalitis (082-083).....	..	..	..
Other infective and parasitic diseases (110-138).....	..	..	..
Malignant neoplasms (140-205).....	280	264	16
Lymphatic and hematopoietic (200-205).....	23	23	..
Benign and unspecified neoplasms (210-239).. <td>6</td> <td>5</td> <td>1</td>	6	5	1
Diabetes (260).....	34	32	2
Anemias (290-293).....	2	2	..
Other diseases of the blood and blood- forming organs (294-299).....	3	3	..
Vascular lesions of the central nervous system (330-334).....	118	107	11
Rheumatic fever (400-402).....	1	1	..

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southeastern Health District, 1960

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	703	650	53
Chronic rheumatic heart disease (410-416)..	18	17	1
Arteriosclerotic and degenerative heart disease (420-422).....	551	514	37
Other diseases of the heart (430-434).....	25	23	2
Hypertensive heart disease (440-443).....	109	96	13
Other hypertensive diseases (444-447).....	5	4	1
Arteriosclerosis (450).....	23	20	3
Other diseases of the circulatory system (451-468).....	32	30	2
Nephritis and nephrosis (590-594).....	11	11	..
Influenza and pneumonia (480-483, 490-493)...	73	67	6
Pneumonia (490-493).....	68	62	6
Bronchitis (500-502).....	4	4	..
Ulcer of the stomach and duodenum (540-541)..	6	5	1
Intestinal obstruction and hernia (560-570)..	10	8	2
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	3	2	1
Cirrhosis of the liver (581).....	25	25	..
Hyperplasia of prostate (610).....	2	2	..
Puerperal causes (640-689).....	..	..	..
Congenital malformations (750-759).....	21	19	2
Certain diseases of early infancy (760-776)..	64	58	6
Pneumonia of newborn (763).....	3	2	1
Senility, ill-defined and unknown conditions (780-795).....	3	3	..
All other diseases.....	111	97	14
Accidents, total (800-962, 965).....	70	61	9
Motor vehicle accidents (810-835).....	20	18	2
All other accidents.....	50	43	7
Suicides (963, 970-979).....	11	11	..
Homicides (964, 980-985).....	9	3	6

Table 3

Communicable Diseases Reported
Southeastern Health District, 1960

Disease	Total	White	Nonwhite
Total	1,358	1,029	329
Chickenpox	150	125	25
Diphtheria .....	..	..	..
German measles	11	10	1
Gonococcal infections	317	129	188
Measles	326	279	47
Meningococcal infections	2	2	..
Mumps	177	174	3
Poliomyelitis, paralytic cases ...	18	16	2
Scarlet fever	32	32	..
Syphilis	92	64	28
Tuberculosis, all forms	114	93	21
Typhoid fever .....	..	..	..
Whooping cough	9	9	..
All others	110	96	14

Table 1

Resident Births
Southern Health District, 1960

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	2,232	1,429	803
Hospital.....	2,179	1,399	780
Home.....	53	30	23
Private Physician.....	45	29	16
Midwife.....	4	1	3
Other.....	4	..	4

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southern Health District, 1960

Cause of Death	Total	White	Nonwhite
All Causes.....	844	672	172
Tuberculosis, all forms (001-019).....	13	7	6
Respiratory tuberculosis (001-008).....	13	7	6
Syphilis (020-029).....	..	..	..
Dysentery (045-048).....	..	..	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	1	..	1
Measles (085).....	..	..	..
Malignant neoplasms (140-205).....	145	115	30
Lymphatic and hematopoietic (200-205).....	9	6	3
Diabetes (260).....	19	17	2
Anemias (290-293).....	..	..	..
Vascular lesions of the central nervous system (330-334).....	50	40	10

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southern Health District, 1960

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	333	278	55
Chronic rheumatic heart disease (410-416).....	12	11	1
Arteriosclerotic and degenerative heart disease (420-422).....	261	221	40
Other diseases of the heart (430-434).....	9	7	2
Hypertensive heart disease (440-443).....	51	39	12
Other hypertensive diseases (444-447).....	4	3	1
Arteriosclerosis (450).....	12	10	2
Other diseases of the circulatory system (451-468).....	16	13	3
Nephritis and nephrosis (590-594).....	4	3	1
Influenza and pneumonia (480-483, 490-493)..	39	29	10
Pneumonia (490-493).....	38	28	10
Bronchitis (500-502).....	4	3	1
Ulcer of the stomach and duodenum (540-541)..	9	8	1
Appendicitis (550-553).....	2	1	1
Intestinal obstruction and hernia (560-570)..	6	5	1
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	4	1	3
Cirrhosis of the liver (581).....	16	15	1
Hyperplasia of prostate (610).....	1	1	..
Puerperal causes (640-689).....	1	..	1
Congenital malformations (750-759).....	13	8	5
Certain diseases of early infancy (760-776)..	35	27	8
Pneumonia of newborn (763).....	4	2	2
Senility, ill-defined and unknown conditions (780-795).....	4	3	1
All other diseases.....	58	41	17
Accidents, total (800-962, 965).....	40	31	9
Motor vehicle accidents (810-835).....	7	4	3
All other accidents.....	33	27	6
Suicides (963, 970-979).....	9	9	..
Homicides (964, 980-985).....	6	4	2

Table 3

Communicable Diseases Reported
Southern Health District, 1960

Disease	Total	White	Nonwhite
Total	702	256	446
Chickenpox	58	35	23
Diphtheria .....	..	..	..
German measles	3	3	..
Gonococcal infections	277	48	229
Measles	115	53	62
Meningococcal infections .....	..	..	..
Mumps	41	21	20
Poliomyelitis, paralytic cases ...	10	8	2
Scarlet fever	7	6	1
Syphilis	84	29	55
Tuberculosis, all forms	79	42	37
Typhoid fever	1	..	1
Whooping cough	2	1	1
All others	25	10	15

Population Estimate, Baltimore, Maryland
July 1, 1961

This report is the first of a series of annual demographic studies based on the 1960 U. S. Census population count for Baltimore City of 939,024 persons. The July 1, 1961 estimate of the city's population is 936,749, with 599,068 white and 337,681 nonwhite residents. The purpose of this report is to describe briefly the components of Baltimore's changing population.

Migration

The July 1961 estimate is derived from the 1960 population adjusted for natural increase, that is, the excess of births over deaths, and migration during the intervening period. These components of population change are shown in the following table.

Components of 1961 Population Estimate

<u>Component</u>	<u>Total</u>	<u>White</u>	<u>Nonwhite</u>
Population - July 1, 1960	939,000	610,000	329,000
Births, July 1, 1960-June 30, 1961	23,542	12,111	11,431
Deaths, July 1, 1960-June 30, 1961	11,323	7,915	3,408
Estimated Net Migration	-14,470	-15,128	658
Population - July 1, 1961	936,749	599,068	337,681

The natural increase in the white population, 4,196 persons, was offset by the estimated migration of 15,128 residents from the city, resulting in a white population loss of 10,932 since July 1, 1960. In the nonwhite population practically all of the increase of 8,681 persons was caused by the natural increase of this population component. The migration of Negroes to Baltimore apparently hit its peak about 1955

and 1956 when the rate was between 2 and 3 per cent of the nonwhite population. Current nonwhite migration estimates are at a level of 0.2 per cent, consequently, growth of the nonwhite population, due to movement to the city, is now negligible.

Age Distribution

Table 1 shows the age distribution of the 1961 estimated population by race. Figure 1 shows the percentage distribution of the population by age and race for the census years 1920-1960.

In the total population there has been a marked increase in the age groups 45-64 and 65 and over during the period 1920 to 1960. For example, in 1920 approximately 1 out of every 5 residents was 45 or over compared to nearly 1 out of 3 at the present time. At the other end of the age scale, that is, among those under age 20, the proportion has varied from about 35 per cent, characteristic of the years 1920, 1930 and 1960, to a low of about 30 per cent in 1940 and 1950. The young adults in the age range 20-44 years have shown a consistent decline from 1920 to 1960.

A comparison of the white and nonwhite segments of the city's population shows another view of Baltimore's changing population. Among white residents during the period 1920-1960, the percentage 45 years of age and over has increased from 22.4 to 36.2 while the per cent in comparable age groups among the nonwhite has remained nearly constant for the last 20 years at about 21 per cent. A marked change in the nonwhite population has occurred in the proportion under age 20 which has increased steadily from 29.8 per cent in 1920 to 44.0 in 1960.

It is not difficult to anticipate the types of problems that will result from these population changes.

1. As a result of the migration from the city of young adults and their families there is an erosion of the resident population's economic potential.

2. The marked increase in percentage of young Negroes in the population points out the source of the increasing demand for health, education, and recreation facilities. In the near future, as these young people enter the labor market, a new set of problems will be felt.

3. The aging white population perhaps reinforced by a movement of older former residents to the city forecasts an increase in the demand for services required by persons who are at high risk of catastrophic illnesses at a time when their income is decreasing.

Thus, lurking behind a modest decrease in total population are changes that will significantly alter the present demographic conditions.

Table 1

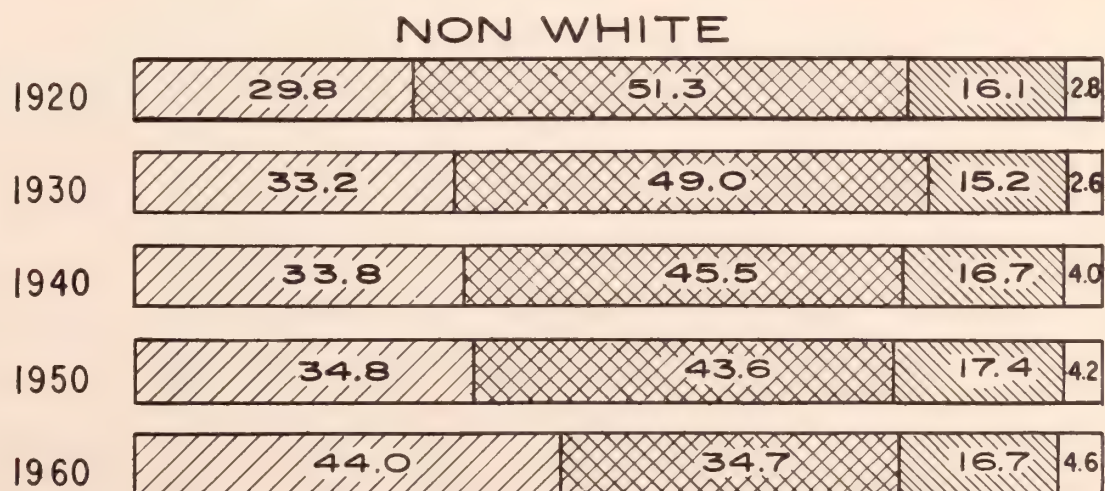
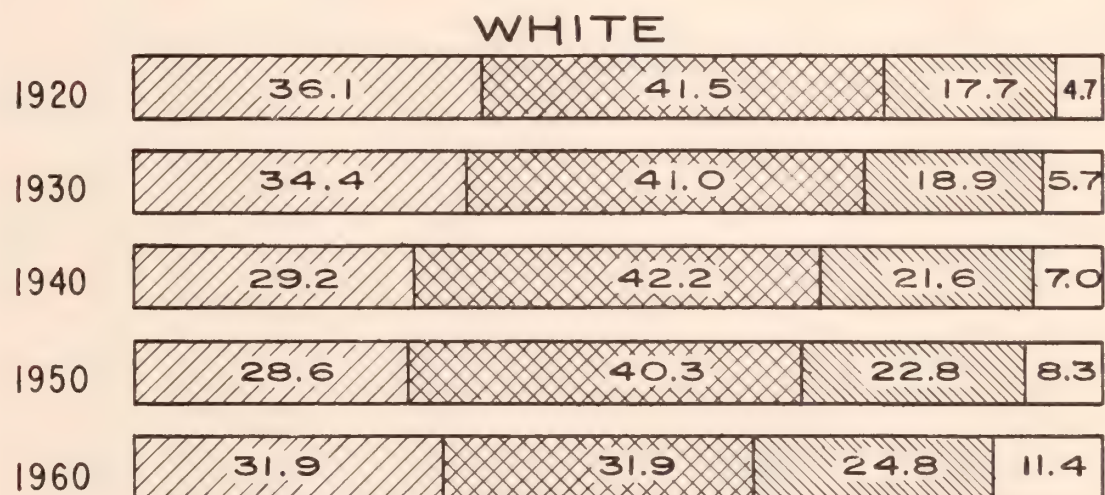
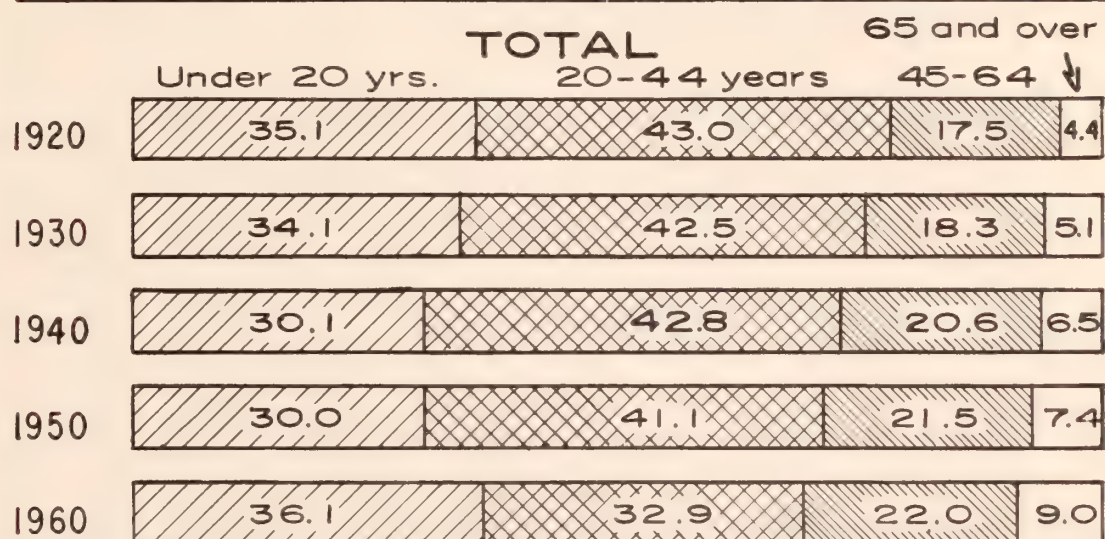
Estimation of Population by Age and Race
1961

Age	Total	White	Nonwhite
Total	936,749	599,068	337,681
Under 5	102,669	53,130	49,539
5 - 9	90,744	48,748	41,996
10 - 14	81,829	47,381	34,448
15 - 19	67,297	41,990	25,307
20 - 24	57,827	36,331	21,496
25 - 29	55,764	33,338	22,426
30 - 34	60,101	35,977	24,124
35 - 39	65,179	40,609	24,570
40 - 44	63,262	41,486	21,776
45 - 49	60,598	41,761	18,837
50 - 54	54,377	39,266	15,111
55 - 59	49,261	36,360	12,901
60 - 64	41,301	32,049	9,252
65 - 69	34,018	27,259	6,759
70 - 74	24,754	20,326	4,428
75 - 79	15,441	12,842	2,599
80 - 84	7,883	6,613	1,270
85 and over	4,444	3,602	842

Figure 1

BALTIMORE CITY'S CHANGING POPULATION

AGE DISTRIBUTION IN PERCENTAGE





BALTIMORE CITY HEALTH DEPARTMENT
RESEARCH AND PLANNING SECTION

QUARTERLY

STATISTICAL

REPORT

BIRTHS

MARRIAGES

MORBIDITY

MORTALITY

FOURTH QUARTER 1961

MARCH 26, 1962 VOL. 13 NO. 4

Maryland Room
University of Maryland Library
College Park, Md.

BALTIMORE CITY HEALTH DEPARTMENT

HUNTINGTON WILLIAMS, M.D.
Commissioner

RESEARCH AND PLANNING SECTION

MATTHEW TAYBACK, Sc.D.
Assistant Commissioner of Health

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation."

Quetelet

Inquiries concerning the materials published, should be addressed to Mr. Todd M. Frazier, Director, Bureau of Biostatistics, Baltimore City Health Department, Baltimore 3, Maryland.

TABLE OF CONTENTS

	Page
A Summary of Vital Events	1-8
B Annual Rates by Month for Births and Selected Causes of Death	9
C Morbidity Rates by Month	10
D Tables of Vital Events	11-14
I Marriages, Births, Deaths by Race	11
II Deaths from Selected Causes	12
III Cases and Deaths from Selected Causes and Infant Deaths by Health Districts	13
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths and Tuberculosis Hospital Admissions	14



BALTIMORE'S HEALTH RECORD FOR 1961

The City of Baltimore experienced a good year in respect to the state of its public health during 1961. Among the more favorable developments were:

1. A record low incidence of paralytic cases of poliomyelitis.

Two cases of this disease were reported in 1961. This is in contrast to the 97 cases reported in 1960 when there was an unexpected outbreak of paralytic poliomyelitis and is the lowest reported figure since 1917 when there were 2 cases. A high polio year is usually followed by a low year.

2. A sharp reduction in death and illness due to respiratory disease. The number of deaths from influenza and pneumonia, which has risen steadily in recent years and reached 466 in 1960, dropped 23 per cent to 359.

Population

The population of Baltimore City declined again in 1961. This drop began in 1945 after the peak had been reached during the World War II employment upswing. The eighteenth decennial census taken in April, 1960, resulted in an estimate of 939,000 as the population of Baltimore City on July 1, 1960. As a consequence of a substantial outmigration of white residents, the population fell to 937,000 by July 1, 1961. White residents, who numbered 610,000 in 1960, declined by two per cent to 599,000. Nonwhite residents increased from 329,000 to 338,000. The loss of white residents by outmigration and the increase in nonwhite residents due to the excess of births over deaths, resulted in an increase of the nonwhite fraction of the population to 36 per cent of the total city population.

During the early part of 1961 additional information on the age characteristics of the residents of the city has become available from the

Bureau of Census. The more important observations which can be made from a study of this material are:

1. The steady decline in white residents results from a marked outmigration of young adults and to a lesser extent of middle aged adults and children under 15 years of age. However, many of these adults continue to earn their livelihood in the city.
2. The number of white residents 65 years of age and over is increasing while the total of white residents is decreasing.
3. The increase in nonwhite residents is reflected in an increase at all age levels but particularly in children and in young adults.

The steady increase in the absolute and relative numbers of older residents, while the total population declines, will bring to the forefront the burdensome problems of chronic illness, and the social and other needs of aged individuals. The rapid increase in the number of young Negro residents, many of whom do not enjoy favorable social and economic circumstances, will place increasing responsibilities on those agencies whose function is to assure an environment in which young children can develop vigorously in a state of physical, mental and social well-being. The selective nature of migration into the city contributes to concentrating underprivileged children in such a manner that they have little opportunity to observe social patterns which make for stable family groups. On the other hand, increasing numbers of Negro residents will find themselves in favorable economic circumstances. For such individuals and families, it is necessary to give urgent consideration to the provision of satisfactory housing opportunities and of adequate private medical and hospital resources.

Maternal and Child Health

In spite of the fact that the population in the Baltimore metropolitan area grows at a rate of approximately two per cent per year, the number of births recorded in hospitals which provide obstetrical care for all except a small fraction of births in the area has not changed in any significant way during the past five years. During 1961, a total of 38,315 live births occurred in Baltimore City, compared to 38,410 in 1960 and 38,855 in 1959. This leveling off of the obstetrical load of the general hospitals has had a salutary effect in that these institutions have had a chance to catch up with the exceptional increase which took place from 1950 to 1957. The present plans of Mercy, St. Joseph's and Women's hospitals and the recently completed construction of Sinai and St. Agnes hospitals combined with the projected replacement of Provident Hospital provide good promise of adequate obstetrical facilities in the near future.

The number of live births among residents in Baltimore City was 23,053 and the corresponding birth rate was 24.6 per 1,000 population. Both differed very little from the related 1960 figures. Of the total births, 51 per cent were white and 49 per cent nonwhite.

There were 12 maternal deaths of which eight were among Negro mothers. The principal causes of these tragic losses were abortion and ectopic pregnancy. The maternal mortality rate of 2.5 per 10,000 live births for white mothers and 8 per 10,000 live births for colored mothers represented levels considered consistent with good obstetrical care.

Infant Mortality

The persistent efforts of the City Health Department during the past two years and the respite in the increased need for obstetrical beds appear to

have accounted for a stabilization of the infant mortality rate. The up and down course of these rates is shown in the table below.

Infant Death Rates by Race - 1950-1961

<u>Year</u>	<u>White</u>	<u>Nonwhite</u>	<u>Year</u>	<u>White</u>	<u>Nonwhite</u>
1961	24.7	39.8	1955	23.7	42.9
1960	24.3	41.3	1954	25.9	42.5
1959	25.0	47.0	1953	26.3	37.2
1958	27.4	44.7	1952	20.9	41.2
1957	24.8	47.7	1951	25.0	39.1
1956	23.8	39.0	1950	21.7	38.0

The difference between the white and nonwhite infant death rates is believed to result largely from the poor home and social circumstances of many of the nonwhite mothers. A markedly high rate of prematurity among Negro mothers has been pinpointed as the central core of the high infant mortality in this group.

Tuberculosis

During 1960 there was little evidence of further progress in the reduction of sickness and death due to tuberculosis. It is encouraging therefore to note that in 1961 the trend of tuberculosis morbidity and mortality resumed its historical decline. It is estimated that there were 749 new cases of tuberculosis reported in 1961, a decrease of 9 per cent from 1960. However, in view of the increase in 1961 of the number of cases which were previously inactive and suffered reactivation, the total number of individuals with tuberculosis who required public health attention was 3,094 on July 1, 1961, a decline of 5.5 per cent from 1960.

The mortality rates from tuberculosis for 1961 are estimated as follows: Total population, 15.9 per 100,000; white, 12.5; nonwhite, 21.7. By contrast, it is of interest to compare these figures with the experience of 1951 just before the full impact of streptomycin and the chemotherapeutic agents was felt.

The tuberculosis death rates for 1951 were: Total population, 52.1 per 100,000; white, 29.4; nonwhite, 122.1. During the past ten years then, the nonwhite rate of death due to tuberculosis has declined 82 per cent.

One of the more burdensome features of the problem of tuberculosis is the necessity of maintaining tuberculosis hospitals, a facility required to afford the individual attacked an optimal opportunity to recover, and to protect the community from infection by an individual with active disease. Admissions to these hospitals are determined by the number of new and reactivated cases. For Baltimore City, the long trend in this respect is a decline of 5 per cent per year. It can be expected therefore that, in the absence of dramatic new discoveries, the total of admissions of residents of Baltimore City to the state tuberculosis hospitals and to the tuberculosis hospital at the Baltimore City Hospitals will decline about 5 per cent per year.

Other Communicable Diseases

Acute respiratory disease, sometimes called the "cold", "virus", or "flu" is actually a complex of infections due to a number of micro-organisms. The similarity of the symptoms which follow an attack by one of these organisms has led to grouping the episodes of illness under the designation, acute respiratory disease. This similarity of symptoms has also permitted the measurement of the frequency of episodes of acute respiratory disease through the continuous survey carried out by the Bureau of Biostatistics each month. This survey provided in 1961, for the first time, comparative information on the prevalence of acute respiratory disease, which permits one to relate the extent of this condition during the year just past, to the experience of 1960. It is fairly certain that during 1961 the prevalence of illness due to respiratory disease was significantly lower than that for 1960.

In the table below is found the monthly percentages of individuals who were reported ill with respiratory disease during 1961 compared with similar percentages for 1960.

Per Cent Reported Ill with Acute Respiratory Disease
By Month, 1960 and 1961
Baltimore City

	1960	1961		1960	1961
January	10	7	July	Not Available	3
February	14	6	August	4	2
March	15	10	September	5	3
April	7	8	October	12	11
May	4	5	November	10	6
June	5	3	December	13	11

The findings of the survey are consistent with the vital statistics on deaths from influenza and pneumonia. In both instances there was a sharp decline in 1961 as contrasted with 1960. Thus deaths from influenza and pneumonia totaled 359 in 1961, a drop of 23 per cent from the previous year.

The venereal diseases, particularly infectious cases of syphilis, continue to defy the most conscientious control efforts that can be launched. In 1961, there were 385 infectious cases of syphilis reported to the City Health Department, an increase of 43 per cent over the 269 cases of 1960 which in turn was higher than the 1959 total. This rise in reported cases of new syphilitic infections is a nationwide phenomenon. The reasons for such an upward trend are difficult to determine accurately. Syphilis does not thrive in the absence of promiscuity of sexual relations. The contrariwise generalization is apt to be true namely that syphilis does thrive in the presence of promiscuous sexual relations. The recent rise in infectious syphilis may then reflect an increase in such behavioral patterns.

Accidents

Among the various forms of accidents those due to motor vehicles are of special interest because of the vast number of incidents that take place each year. The recent history with such accidents occurring in Baltimore City is shown below:

<u>Year</u>	<u>Motor Vehicle Accidents Reported</u>	<u>Deaths</u>	<u>Persons Injured</u>
1957	17,991	105	8,102
1958	16,651	112	7,625
1959	18,007	106	8,680
1960	18,292	110	8,257

The estimates for 1961 in these several categories are:

1961	17,351	78	8,010
------	--------	----	-------

This then has been a good year in respect to automobile accidents. Some may wish to ascribe the drop in deaths, which is substantial, to the introduction in January 1961 of the State administered penalty point system. However, the more likely explanation is the exceptionally heavy snow fall which took place early in 1961, for it was in the first four months of the year when few drivers could be affected by the penalty point system that there was a drop of 20 deaths in the accident total when compared with 1960.

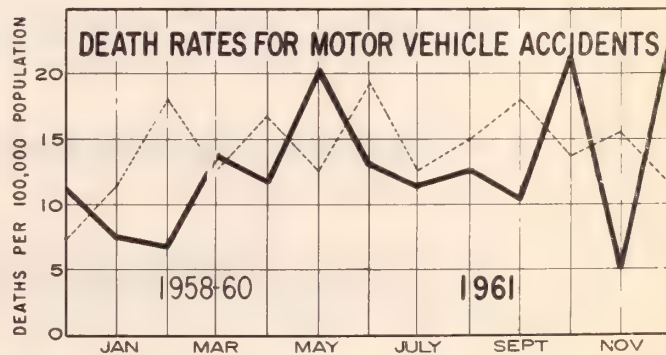
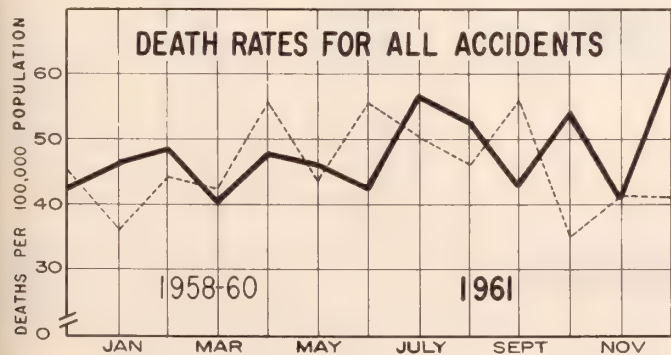
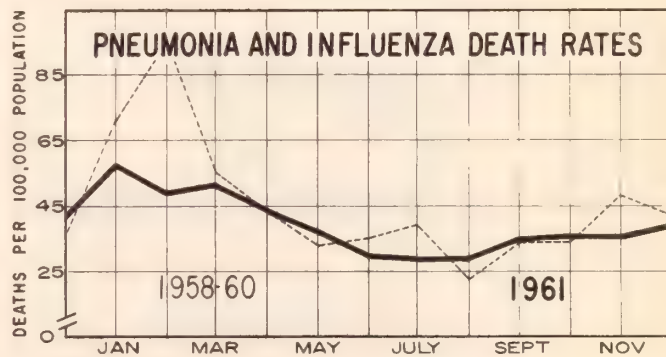
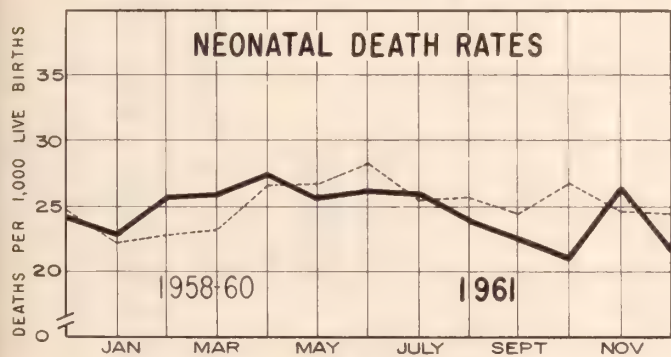
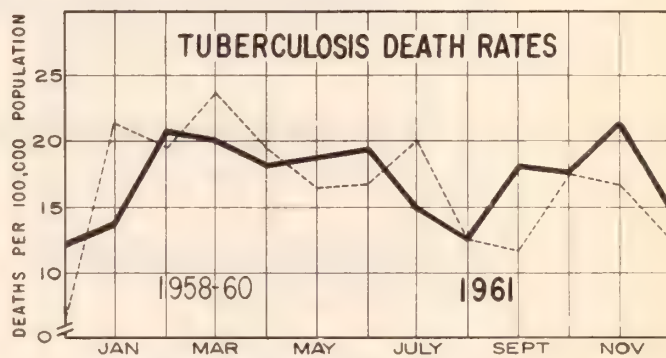
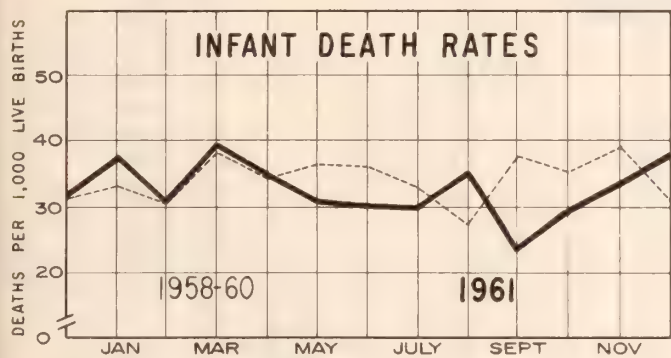
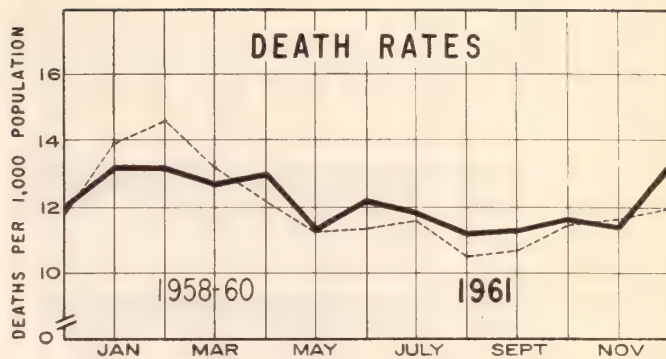
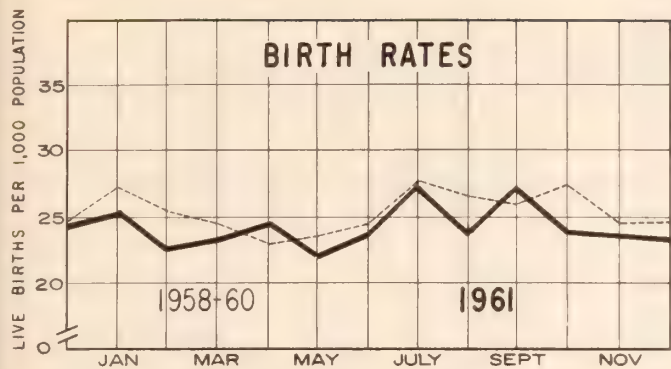
There was no significant change in the loss of lives due to home and occupational accidents.

Principal Causes of Deaths

The great killers--diseases of the cardiovascular system, cancer, cerebral hemorrhage, diseases of early infancy, and accidents--remained in the same relative position in 1961 as they have retained for the past five years.

Prevention in respect to some of these diseases is possible to a limited extent. Lung cancer which takes the lives of 300 Baltimore City residents each year, about 90 per cent of whom are men, is in many instances due to a long history of heavy cigarette smoking. Moderation in the use of cigarettes can do little harm to and much good for those who are heavy smokers. Cancer of the cervix of the uterus takes an annual toll of 70 female lives, primarily at ages when the individual involved could normally expect to live 15 or more years. The state of knowledge in respect to this disease indicates that routine gynecological examination including the necessary laboratory tests, would result in a significant reduction of the lives lost to this form of cancer. Part of the tragedy in this respect is that there is a higher risk of death due to cancer of the cervix among women with limited economic resources who are least able to pay for routine preventive care required.

Until the science of prevention of the great killers can achieve the necessary advances, it will be necessary to seek to reduce the disability resulting from the chronic diseases. This objective is best attained by securing for each individual the services he requires at various stages in his disease process. At appropriate times he may require the attention of a personal physician, a consulting internist, a surgeon, a physical therapist, a visiting nurse, or admission to a general hospital, a chronic disease hospital or a nursing home. The complexity of services required often demands a coordinating device. This can be established in a general hospital, in a chronic disease hospital or in a community oriented organization such as a local health department. There appears good likelihood that it will prove possible within a short period, for Baltimore City, to establish such a community-wide organization and service.



BALTIMORE CITY HEALTH DEPARTMENT
BALTIMORE HEALTH SURVEY

MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

1961

ALL ILLNESS
RESPIRATORY ILLNESS

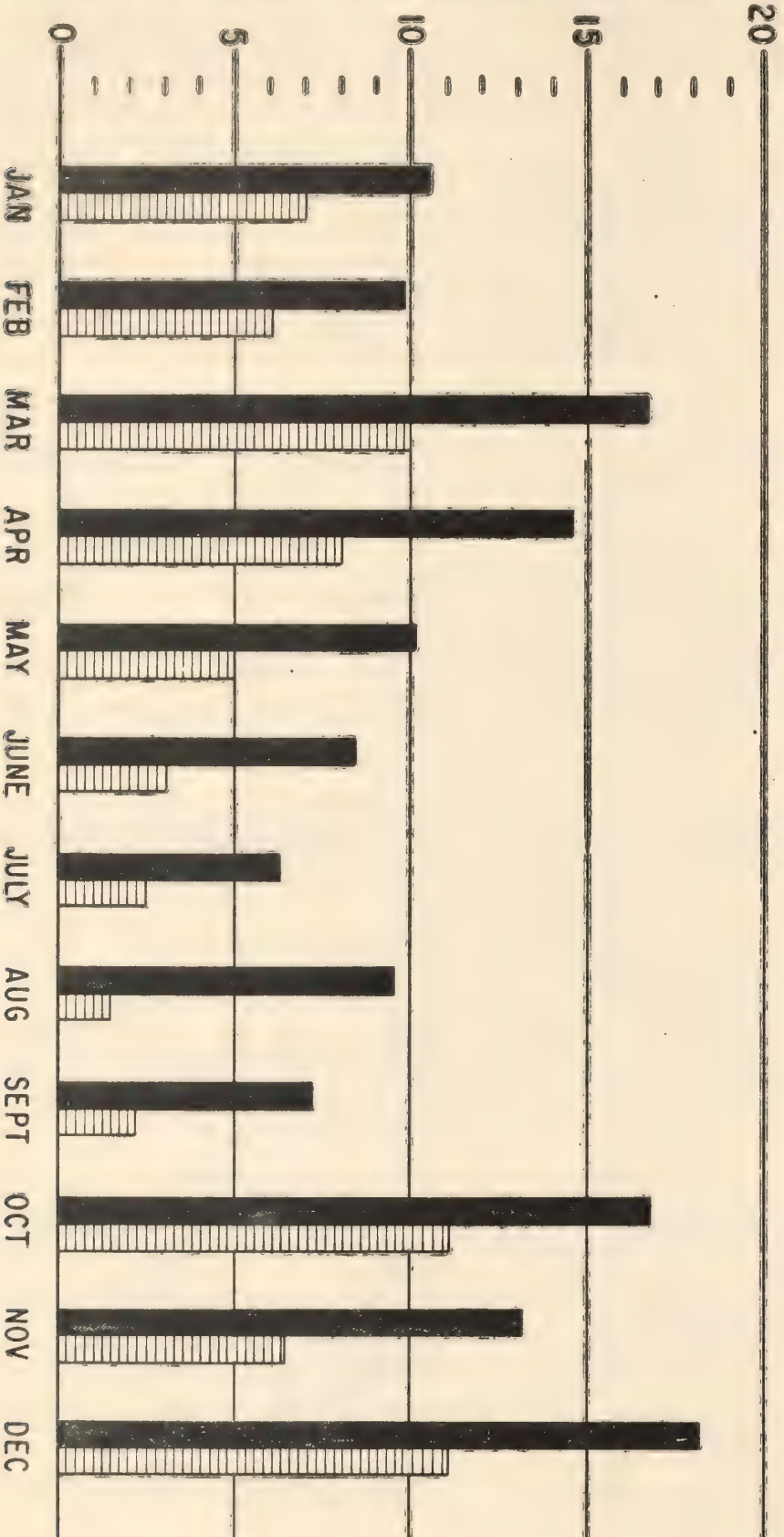


FIGURE 1

TABLE I

MARRIAGES RECORDED, RESIDENT BIRTHS, DEATHS AND INFANT DEATHS
AND CORRESPONDING RATES BY RACE: FOURTH QUARTER, 1961 AND 1958-1960

Vital Event	October-December				January-December	
	Number		Rate*		Rate*	
	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60
ALL RACES						
Marriages recorded.....	2,372	2,244	10.0	9.5	9.6	9.7
Births.....	5,638	6,046	23.9	25.5	24.6	25.4
Deaths, all causes.....	2,885	2,799	12.2	11.8	12.3	12.0
Deaths, under one year.....	188	213	33.3	35.2	32.6	34.4
under 28 days.....	127	150	22.5	24.8	24.3	25.2
28 days-11 months...	61	63	10.8	10.4	8.3	9.2
WHITE						
Marriages recorded.....	1,465	1,387	9.7	8.9	9.6	9.1
Births.....	2,826	3,199	18.7	20.4	19.8	20.4
Deaths, all causes.....	2,003	1,956	13.3	12.5	13.4	12.8
Deaths, under one year.....	82	79	29.0	24.7	25.7	25.8
under 28 days.....	56	59	19.8	18.4	18.9	19.2
28 days-11 months...	26	20	9.2	6.3	6.8	6.6
NONWHITE						
Marriages recorded.....	907	857	10.6	10.7	9.6	10.8
Births.....	2,812	2,847	33.0	35.4	33.1	35.2
Deaths, all causes.....	882	843	10.4	10.5	10.3	10.5
Deaths, under one year.....	106	134	37.6	47.1	39.8	44.0
under 28 days.....	71	91	25.2	32.0	30.0	31.9
28 days-11 months...	35	43	12.4	15.1	9.8	12.1

Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1961
Total, 937,000; White, 599,000; Nonwhite, 338,000.

TABLE II

RESIDENT DEATHS FROM SELECTED CAUSES
FOURTH QUARTER, 1961 AND 1958-1960

Cause of Death	October-December				January-December	
	Number		Rate per 100,000*		Rate per 100,000*	
	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60
All Causes	2,885	2,799	12.2	11.8	12.3	12.0
Tuberculosis (001-019).....	44	36	18.6	15.2	17.5	17.2
Syphilis (020-029).....	9	9	3.8	3.8	3.2	3.7
Cancer (140-205).....	441	447	186.7	188.7	204.4	196.1
Diabetes Mellitus (260).....	57	55	24.1	23.2	26.1	24.8
Vascular Lesions of the Central. Nervous System (330-334).....	201	220	85.1	92.9	91.1	93.0
Diseases of the Heart (410-443).	1,287	1,185	544.9	500.1	524.1	504.1
Influenza and Pneumonia (480-483, 490-493).....	81	95	34.3	40.1	38.3	45.5
Nephritis and Nephrosis (590-594).....	28	27	11.9	11.4	9.8	10.1
Puerperal Causes (640-652, 670-689).....	2	2	0.8	0.8	1.0	1.1
Congenital Malformations (750-759).....	35	28	14.8	11.8	15.6	13.7
Certain Diseases of Early Infancy (760-776).....	115	140	48.7	59.1	53.4	58.8
Suicides (963, 970-979).....	22	21	9.3	8.9	9.9	9.5
Homicides (964, 980-999).....	23	21	9.7	8.9	9.2	10.6
Accident (800-802, 810-835, 840-962)....	122	83	51.7	35.0	47.3	44.5
Motor Vehicle (810-835).....	39	32	16.5	13.5	13.1	14.7

*Rates shown for all causes are per 1,000 population.

TABLE III

CASES AND DEATHS FROM SELECTED CAUSES, AND INFANT DEATHS BY HEALTH DISTRICTS
FOURTH QUARTER, 1961 AND 1958-1960 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Western		Druid		Southeastern		Southern	
	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60	1961	Average 1958-60
Infant deaths	188	218	56	72	43	45	43	53	23	27	20	21
Tuberculosis, Cases	173	191	54	52	33	42	43	51	24	27	19	19
Deaths	43	36	11	10	7	7	9	11	8	5	5	3
Syphilis	463	344	102	93	140	83	143	126	39	19	31	18
Cases	8	10	5	3	1	1	1	4	1	1	0	0
Deaths											3	3
Typhoid fever	2	0 3	1	0	0	0	0	0 3	0	0	1	0
Cases	0	0	0	0	0	0	0	0	0	0	0	0
Deaths												
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0
Cases	0	0	0	0	0	0	0	0	0	0	0	0
Deaths												
Whooping	13	21	7	7	2	3	4	4	0	4	0	3
Cases	0	0	0	0	0	0	0	0	0	0	0	0
Deaths												
Meningococcal	2	3	0	1	0	1	0	0.3	2	0.3	0	0.3
Cases	1	1	0	0.3	0	0.7	0	0	1	0	0	0
Deaths												
Measles	252	137	85	59	59	30	76	16	27	25	5	7
Cases	0	0.6	0	0.3	0	0	0	0.3	0	0	0	0
Deaths												
Acute polio-	1	22	0	8	0	3	0	3	0	4	1	4
myelitis	0	1 3	0	0.3	0	0	0	0	0	1	0	0
(paralytic)												

All figures corrected for residence within Maryland

*Totals include some intranfers allocated to Baltimore City but not otherwise allocated to health districts

TABLE IV

NEWLY REPORTED AND REACTIVATED CASES OF TUBERCULOSIS
TUBERCULOSIS DEATHS AND TUBERCULOSIS HOSPITAL ADMISSIONS
FOURTH QUARTER 1961 AND 1960

	OCTOBER-DECEMBER		JANUARY-DECEMBER	
	Total		Total	
	1961	1960	1961	1960
Newly Reported Cases.....	172	191	749	823
White.....	77	80	330	323
Nonwhite.....	95	111	419	500
Reported After Death.....	13	10	46	40
Number of Readmissions.....	25	27	123	95
White.....	15	12	66	48
Nonwhite.....	10	15	57	47
Number of Tuberculosis Deaths.....	47	43	148	149
White.....	23	27	75	85
Nonwhite.....	24	16	73	64
Number of Patients Admitted to Tuberculosis Hospitals.....	160	183	742	809
Number of Patients on Chemotherapy December 31.....			1,969	1,685
Started in current year.....			770	800
Started prior to current year.....			1,199	885



BALTIMORE CITY HEALTH DEPARTMENT
RESEARCH AND PLANNING SECTION

QUARTERLY
STATISTICAL
REPORT

Maintained by
University of Maryland Library
College Park, Md.

MARRIAGES

BIRTHS

MORTALITY

MORBIDITY

FIRST & SECOND QUARTERS - 1962

OCTOBER 10, 1962

Vol.14, Nos.1 & 2

BALTIMORE CITY HEALTH DEPARTMENT

ROBERT E. FARBER, M.D.

Commissioner

RESEARCH AND PLANNING SECTION

MATTHEW TAYBACK, Sc.D.

Assistant Commissioner of Health

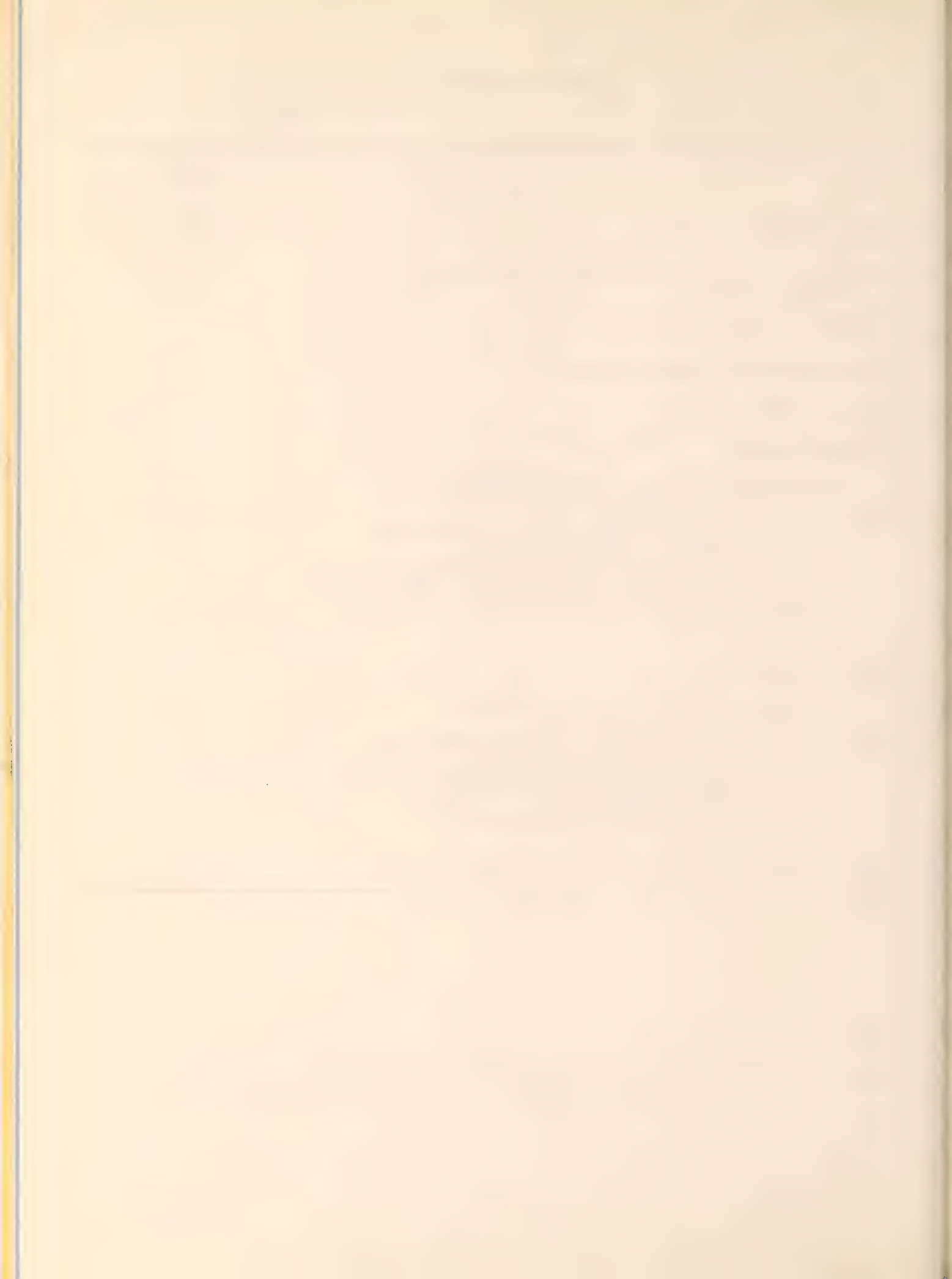
"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation."

Quetelet

Inquiries concerning the materials published, should be addressed to Mr. Todd M. Frazier, Director, Bureau of Biostatistics, Baltimore City Health Department, Baltimore 3 Maryland.

Table of Contents

	Page
A Summary of Vital Events	1 - 2
B Annual Rates by Month for Births and Selected Causes of Death	3
C Morbidity Rates by Month	4
D Average Morbidity Rates by Month	5
E Tables of Vital Events	
<u>First Quarter</u>	
I Marriages, Births, Deaths by Race	6
II Deaths From Selected Causes	7
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	8
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths, Tuberculosis Hospital Admissions and Patient's Receiving Chemotherapy	9
<u>Second Quarter</u>	
I Marriages, Births, Deaths by Race	10
II Deaths From Selected Causes	11
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	12
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths and Tuberculosis Hospital Admissions	13
F Medical Assistance to the Aged Population Survey	14 -18



Vital Events - Baltimore, Maryland
January-June, 1962

Births

The birth rate for Baltimore City during the period January-June, 1962 was 22.6 per 1,000 population compared to 24.3 for the average of the first six months of 1959-1961. Both white and nonwhite birth rates dropped for the first six months of this year. The white birth rate, now 17.9 per 1,000, is nearing the level of the late 1920's and early 1930's. The nonwhite birth rate is now 31.0, a marked drop from the rates of 35 and 36 per 1,000 observed in the period 1957-1959. If this trend continues for the remainder of the year, there will be about 1,400 fewer resident births in 1962 than there were in 1961. This is a decrease of nearly 6 per cent.

An even greater decline has occurred among non-resident births in the first six months of 1962. If this trend continues, non-resident births for the year will be down 1,200 or about 8 per cent from 1961.

Mortality

Resident deaths numbered 5,845 for the first six months of 1962 giving a crude death rate of 12.6. This is nearly the same as the rate of 12.7 noted for the comparable months in 1959-1961. The motor vehicle accident death rate, which during the first half of 1961 showed a drop attributed by some to the license revocation laws, is now up from 12.2 per 100,000 to 15.5. To date 72 residents of the city have been killed in motor vehicle accidents compared to 57 for the first six months of 1961.

Infant and Maternal Mortality

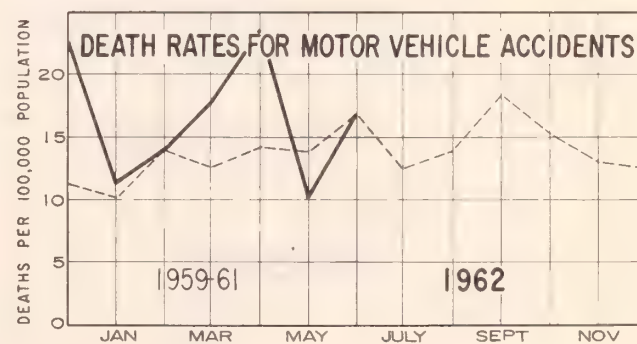
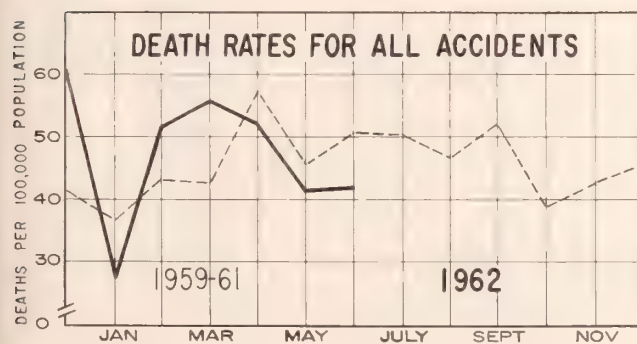
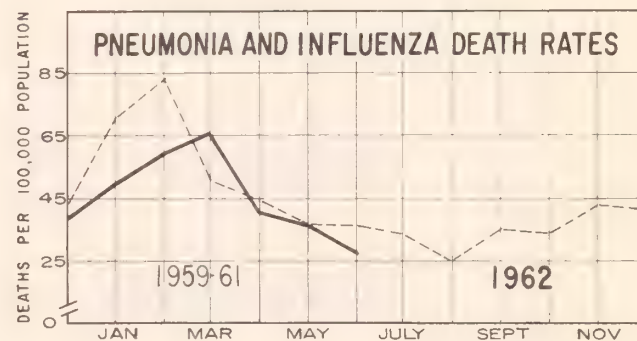
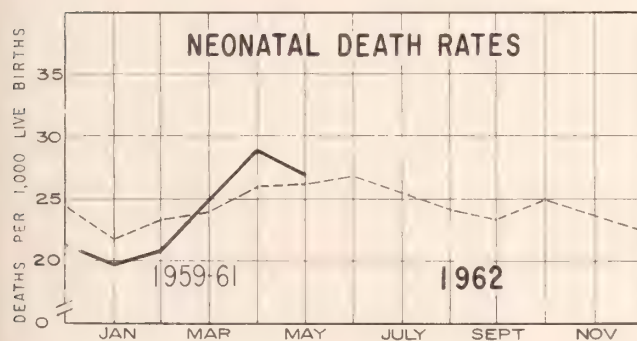
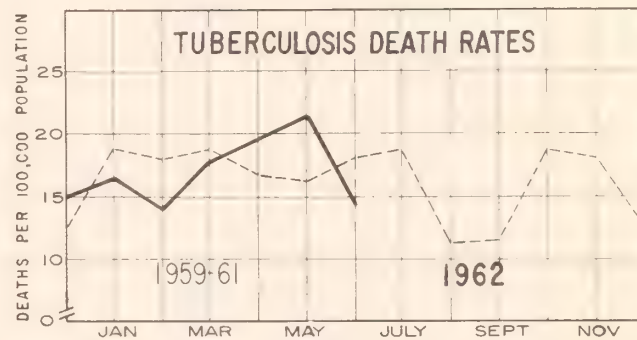
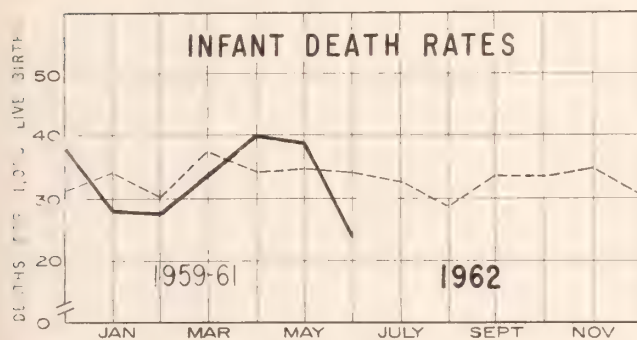
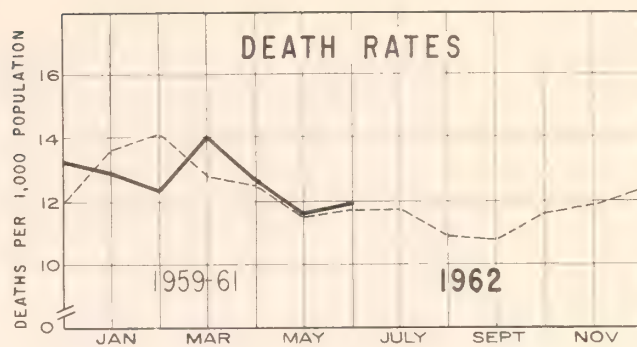
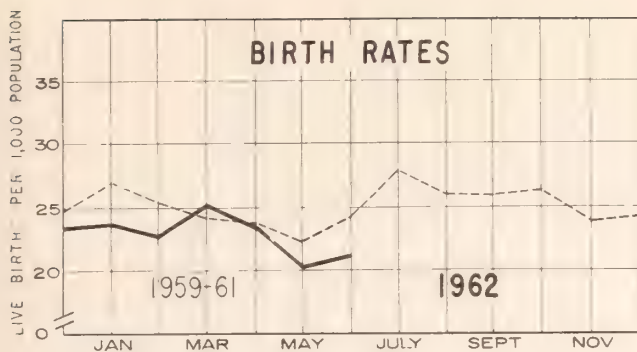
The nonwhite infant death rate decreased from 43.1, an average for 1959-1961, to 37.2 for the comparable months in 1962, a drop of 14 per cent. Both neonatal and post neonatal death rates decreased for this group.

Infant, neonatal and post neonatal death rates for white births remained constant compared to the 1959-1961 experience. Five deaths were ascribed to puerperal causes during the months January-June of 1962.

Morbidity

Information obtained from the Baltimore Health Survey for the first six months of 1962 showed that acute respiratory illnesses did not exceed the average rates for comparable months in 1960 and 1961 (Figure 1). The continuation of this survey into its third year is beginning to give a useful standard for appraising the extent of respiratory illness in the community.

Newly reported cases of tuberculosis increased from 390 in the first six months of 1961 to 414 in 1962, an increase of 24 cases or 6 per cent. Admissions and readmissions both increased 6 per cent over the 1961 figure. The number of patients on chemotherapy increased from 1,878 as of June 30, 1961 to 2,197 in 1962, a change of 17 per cent.



BALTIMORE HEALTH SURVEY

MORBIDITY DUE TO ACUTE RESPIRATORY ILLNESS
AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275 - 325 PERSONS) BY MONTH

□ AVERAGE 1960-1961
■ 1962

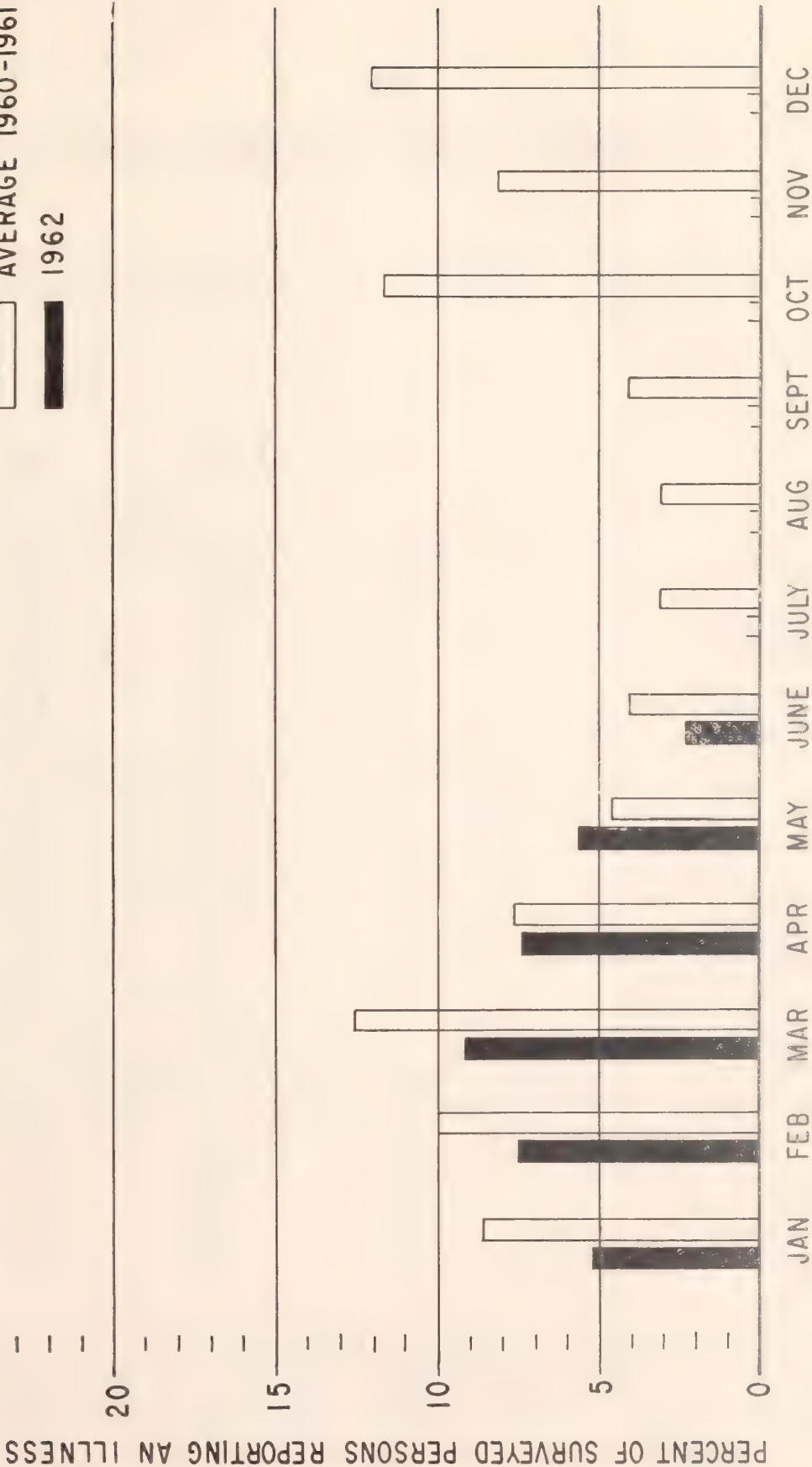


Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: First Quarter, 1962 and 1959-1961

Vital Event	JANUARY-MARCH			
	Number		Rate*	
	1962	Average 1959-61	1962	Average 1959-61
	All Races			
Marriages recorded.....	2,050	1,930	8.9	8.3
Births.....	5,490	5,870	23.8	25.4
Deaths, all causes.....	3,020	3,113	13.1	13.4
Deaths, under one year.....	163	200	29.7	34.0
under 28 days.....	113	137	20.6	23.3
28 days-11 months.....	50	63	9.1	10.7
White				
Marriages recorded.....	1,278	1,154	8.7	7.7
Births.....	2,761	3,054	18.7	20.3
Deaths, all causes.....	2,075	2,154	14.0	14.3
Deaths under one year.....	73	79	26.4	25.9
under 28 days.....	54	55	19.6	18.0
28 days-11 months.....	19	24	6.8	7.9
Nonwhite				
Marriages recorded.....	772	776	9.3	9.6
Births.....	2,729	2,816	32.7	34.7
Deaths, all causes.....	945	929	11.3	11.5
Deaths, under one year.....	90	121	33.0	43.0
under 28 days.....	59	82	21.6	29.1
28 days-11 months.....	31	39	11.4	13.9

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1961--total population 937,000; white, 599,000; nonwhite, 338,000.

Table II

Resident Deaths From Selected Causes
First Quarter, 1962 and 1959-1961

Cause of Death	JANUARY-MARCH			
	Number		Rate Per 100,000*	
	1962	Average 1959-61	1962	Average 1959-61
All Causes.....	3,020	3,113	13.1	13.4
Tuberculosis (001-019).....	37	43	16.0	18.6
Syphilis (020-029).....	7	9	3.0	3.9
Cancer (140-205).....	441	473	190.9	204.3
Diabetes mellitus (260).....	85	63	36.8	27.2
Vascular lesions of the central nervous system (330-334).....	207	251	89.6	108.4
Diseases of the heart (410-443).....	1,382	1,347	598.2	581.8
Influenza and pneumonia (480-483), 490-493).....	129	152	55.8	65.6
Nephritis and nephrosis (590-594).....	16	23	6.9	9.9
Puerperal causes (640-652, 670-689)...	4	2	1.7	0.9
Congenital malformations (750-759)....	38	36	16.4	15.5
Certain diseases of early infancy (760-776).....	100	130	43.3	56.1
Suicides (963, 970-979).....	19	24	8.2	10.4
Homicides (964, 980-999).....	22	25	9.5	10.8
Accidents (800-802, 810-835, 840-962)..	107	93	46.3	40.2
Motor vehicles (810-835).....	33	28	14.3	12.1

*Rates shown for all causes are per 1,000 population.

TABLE I-1
CASES AND DEATHS FROM SELECTED CAUSES AND INFANT DEATHS BY HEALTH DISTRICTS
FIRST QUARTER 1962 AND 1959-1961 AVERAGE

Cause of Illness and Death	*TOTAL CITY		EASTERN		WESTERN		DEJUN		SOUTHEASTERN		SOUTHERN	
	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61
Infant deaths	163	193	50	59	45	46	38	46	16	23	10	19
Tuberculosis	197	198	64	58	38	46	39	47	32	28	24	19
all forms	36	42	11	12	4	11	6	10	8	5	5	4
Syphilis	373	368	119	97	100	100	101	114	26	28	23	22
Deaths	7	10	2	2 3	1	1 3	3	4 0	0	0 3	1	0
Typhoid	0	0	0	0	0	0	0	0	0	0	0	0
Fever	1	0	0	0	0	0	1	0	0	0	0	0
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Whooping	20	12	5	2 7	6	4 7	3	3 0	4	1 7	2	0
cough	1	0	0	0	0	0	0	0	1	0	0	0
Meningococcal	1	8	0	1 7	0	2 0	0	1 3	0	0 3	1	2 7
infections	0	2 7	0	0 7	0	0 7	0	1 3	0	0	0	0
Measles	857	660	277	244	232	113	197	172	71	99	80	30
Cases	1	0 3	0	0	0	0	1	0	0	0	0	0 3
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Acute polio-	0	0	0	0	0	0	0	0	0	0	0	0
myelitis	0	0 3	0	0	0	0	0	0	0	0	0	0 3
(paralytic)	0	0 3	0	0	0	0	0	0	0	0	0	0 3

All figures corrected for ascertainment within Maryland.

Totals include some nonresidents allocated to Baltimore City but not otherwise allocated. See Health Department.

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths, Tuberculosis Hospital Admissions
and Patients Receiving Chemotherapy
First Quarter 1962 and 1961

	JANUARY-MARCH	
	Total	
	1962	1961
Newly Reported Cases.....	198	180
White.....	98	85
Nonwhite.....	100	95
Reported After Death.....	14	11
Number of Readmissions.....	31	27
White.....	12	16
Nonwhite.....	19	11
Number of Tuberculosis Deaths.....	37	36
White.....	17	18
Nonwhite.....	20	18
Number of Patients Admitted to Tuberculosis Hospitals.....	204	183
Number of Patients on Chemotherapy.....	2,073	1,715
Started in current year.....	221	231
Started prior to current year.....	1,852	1,484

Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Second Quarter, 1962 and 1959-1961

Vital Event	APRIL-JUNE				JANUARY-JUNE	
	Number		Rate*		Rate*	
	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61
	All Races					
Marriages recorded.....	2,471	2,580	10.6	11.0	9.7	9.7
Births.....	5,030	5,456	21.5	23.3	22.6	24.3
Deaths, all causes.....	2,825	2,786	12.1	11.9	12.6	12.7
Deaths, under one year.....	172	188	34.2	34.5	31.8	34.3
under 28 days.....	135	143	26.8	26.2	23.6	24.7
28 days-11 months.....	37	45	7.4	8.3	8.2	9.6
White						
Marriages recorded.....	1,673	1,718	11.2	11.3	9.9	9.5
Births.....	2,568	2,841	17.2	18.7	17.9	19.5
Deaths, all causes.....	1,975	1,976	13.2	13.0	13.6	13.7
Deaths, under one year.....	69	75	26.9	26.4	26.6	26.1
under 28 days.....	56	57	21.8	20.1	20.6	19.0
28 days-11 months.....	13	18	5.1	6.3	6.0	7.1
Nonwhite						
Marriages recorded.....	798	862	9.5	10.5	9.4	10.0
Births.....	2,462	2,615	29.2	31.9	31.0	33.3
Deaths, all causes.....	850	810	10.1	9.9	10.7	10.7
Deaths, under one year.....	103	113	41.8	43.2	37.2	43.1
under 28 days.....	79	86	32.1	32.9	26.6	30.7
28 days-11 months.....	24	27	9.7	10.3	10.6	12.4

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1961--total population 937,000; white, 599,000; nonwhite, 338,000.

Table II

Resident Deaths From Selected Causes
Second Quarter, 1962 and 1959-1961

Cause of Death	APRIL-JUNE				JANUARY-JUNE	
	Number		Rate Per 100,000*		Rate Per 100,000*	
	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61
All Causes.....	2,825	2,786	12.1	11.9	12.6	12.7
Tuberculosis (001-019).....	43	39	18.4	16.7	17.2	17.6
Syphilis (020-029).....	15	8	6.4	3.4	4.7	3.7
Cancer (140-205).....	488	474	208.9	202.5	199.9	203.4
Diabetes mellitus (260).....	67	62	28.7	26.5	32.7	26.8
Vascular lesions of the central nervous system (330-334).....	179	204	76.6	87.1	83.1	97.5
Diseases of the heart (410-443).....	1,216	1,147	520.5	489.9	559.1	535.6
Influenza and pneumonia (480-483, 490-493).....	77	91	33.0	38.9	44.5	52.2
Nephritis and nephrosis (590-594).....	22	24	9.4	10.3	8.2	10.1
Puerperal causes (640-652, 670-689).....	1	1	0.4	0.4	1.1	0.9
Congenital malformations (750-759).....	24	35	10.3	15.0	13.3	15.0
Certain diseases of early infancy (760-776).....	121	129	51.8	55.1	47.6	55.6
Suicides (963, 970-979).....	26	20	11.1	8.5	9.7	9.7
Homicides (984, 980-999).....	22	20	9.4	8.5	9.5	9.7
Accidents (800-802, 810-835, 840-962).....	106	120	45.4	51.3	45.8	45.7
Motor vehicles (810-835).....	39	36	16.7	15.4	15.5	13.7

*Rates shown for all causes are per 1,000 population.

TABLE III

CASES AND DEATHS FROM SELECTED CAUSES AND INFANT DEATHS BY HEALTH DISTRICTS
SECOND QUARTER, 1962 and 1959-1961 AVERAGE

Cause of Illness and Death	Total City		Eastern		Western		Druid		Southeastern		Southern	
	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61
Infant deaths	172	191	65	57	41	46	41	44	12	25	11	19
Tuberculosis Cases Deaths	221 42	226 37	76 8	62 9	48 7	52 9	45 9	55 7	34 11	38 9	17 2	19 3
Syphilis Cases Deaths	428 15	432 9	116 4	112 2.7	124 4	117 0.7	121 6	140 2.7	24 0	34 1.7	39 1	18 0.3
Typhoid fever Cases Deaths	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Diphtheria Cases Deaths	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Whooping cough Cases Deaths	13 1	14 0	1 0	3.7 0	5 1	5.7 0	5 0	1.3 0	6 0	3.0 0	0 0	0.3 0
Meningococcal infections Cases Deaths	0 0	5.7 1	0 0	0.7 0	0 0	1.3 0.3	0 0	1.3 0.3	0 0	1.0 0.3	0 0	1.3 0
Measles Cases Deaths	688 0	823 0.7	211 0	295 0	82 0	143 0	171 0	206 0.4	150 0	119 0	74 0	59 0.3
Acute polio- myelitis (paralytic) Cases Deaths	0 0	0 1.3	0 0	0 0.7	0 0	0 0	0 0	0 0	0 0	0 0.6	0 0	0 0

A figure not corrected for residence within Maryland.

Table compiled from data furnished by the Health Department, Maryland, and the Bureau of Health Statistics, U.S. Department of Health, Education and Welfare.

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths and Tuberculosis Hospital Admissions
Second Quarter and Semi-Annual 1962 and 1961

	APRIL-JUNE		JANUARY-JUNE	
	Total		Total	
	1962	1961	1962	1961
Newly Reported Cases.....	216	210	414	390
White.....	87	100	185	185
Nonwhite.....	129	110	229	205
Reported After Death.....	11	15	25	26
Number of Readmissions.....	39	39	70	66
White.....	15	22	27	38
Nonwhite.....	24	17	43	28
Number of Tuberculosis Deaths....	34	42	71	78
White.....	17	23	34	41
Nonwhite.....	17	19	37	37
Number of Patients Admitted to Tuberculosis Hospitals.....	215	211	419	394
Number of Patients on Chemotherapy				
June 30.....			2,197	1,878
Started in current year.....			469	435
Started prior to current year.....			1,728	1,443

Medical Assistance to the Aged Population Survey*

Under the provisions of Public Law 86-778, the Kerr-Mills Act, passed by the 86th U. S. Congress, a medical care program for medically indigent persons 65 years of age and older was inaugurated on June 1, 1961 for Baltimore City residents, as a part of a statewide program. The operating characteristics of this program are determined from studies of the bills received by the city for medical services given to Medical Assistance to the Aged (MAA) registrants. An unknown factor in the program's administration however, is the extent to which registrants have difficulty in obtaining medical services, particularly the services of a private physician. To obtain this information it was necessary to talk to registrants and ask them about their experience with the services offered under the Kerr-Mills Act. The Baltimore Health Survey, normally used to give information on a cross section of the city's population provided an efficient method of reaching this segment of the city's population, the MAA registrants.

During the month of July 1962, the 100 interviews usually made among the general population of Baltimore City were allocated to MAA registrants who had been enrolled in the program for at least six months. In addition to the questions on the basic questionnaire, which was used for all members in households of the MAA clients, a special questionnaire was used to develop information about patient-physician relationship under the MAA program. The purpose here is to describe the survey results for this special group.

Of 100 MAA registrants last known to be living in the city and not in institutions, 86 were successfully interviewed. The 14 non-interviews consisted of 6 deaths, 7 not at home and 1 refusal. As might be expected, because of single person family units, the interviewed families were on the average smaller

*Prepared by Todd M. Frazier, Sc.M., Director, Bureau of Biostatistics, Baltimore City Health Department

than families in the general population, 2.92 persons per family for MAA registrants compared to 3.43 in the citywide population. Among the MAA registrants, 58 per cent were white. Nearly 97 per cent of the MAA registrants had been at their current address for at least one year. In the general population 85 per cent live at the same address for at least one year. Thus, the MAA group is less mobile.

Medical Care for MAA Registrants

The following table shows the responses given by 86 MAA registrants regarding types of medical care received since enrolling in this program. Seventy nine out of the 86 registrants or nearly 92 per cent received at least one of the services indicated by the questions listed below:

<u>Question - Have you:</u>	<u>Per Cent Who Received Stated Type of Care</u>
had any dental care?	12
been to a medical care clinic?	74
had laboratory tests or X-ray?	72
received prescribed drugs or medical supplies?	74
been to a private physician?	55

The results also show that 83 per cent of the Negro MAA registrants had attended a medical care clinic compared to 68 per cent for white registrants. On the other hand, 62 per cent of the white MAA clients had seen a private physician compared to 41 per cent for the nonwhite. This preference of the Negro for clinic service rather than private physician care is either a carry over from utilization practices developed prior to becoming eligible for this program or is associated with a scarcity of private practitioners for the Negro MAA patient.

Among the 86 interviewed persons on the MAA program, 47 persons or about 55 per cent had been to a private physician. Of the 39 who had not, 6 reported

that they needed a physician's service but failed to obtain care. The reasons given are shown below.

<u>Reason Given</u>	<u>Number of MAA Registrants</u>
Not assigned to a physician	2
Doctor wouldn't make night calls	1
Doctor refused to take MAA patients	1
Registrant tore up identification card - didn't want to accept welfare	1
Buys own medicine at drug store	1

In the MAA program, registrants are not assigned to a physician but are instructed to go to their family physician. If they don't have a personal physician they are requested to call the Medical Care Section for assistance in locating one. Thus, the two people who were waiting to be assigned to a physician didn't understand the program.

Among the 47 persons who said they had needed a physician's services, 34 had no trouble obtaining medical care. Of those who did have trouble, 13 cases in all, 9 reported that the physician didn't want MAA patients and in 2 of these cases the reason given by the doctor was that the fee was too low (\$2.00 for an office visit). Several patients stated that they had trouble in obtaining services because the doctor's office hours were inconvenient.

Another area of interest in MAA patient-physician relationship was the extent to which patients stayed with the doctor they had prior to coming on the program. Of the 47 who had seen a doctor as MAA registrants, 31 or about 2 out of every 3 stayed with their usual family doctor. The 16 who, after becoming MAA clients, changed doctors gave these reasons: doctor refused (6 cases); family doctor died (4 cases); others reported that their doctor would not make home calls and one person stated that he never had a private medical doctor.

The public health nurses who interviewed these elderly people reported that their comments indicated a reluctance by some to accept welfare or charity services. Three respondents reported difficulty in getting pharmacists to honor their MAA cards.

Summary

1. Ninety-two per cent of the MAA registrants interviewed had received at least one service from the program.
2. Fifty-five per cent had been to a private physician since coming on the program.
3. Of the 39 registrants who had not been to a private physician, there were 6 who wanted a physician, but failed to obtain medical care.
4. Nearly three-fourths of the MAA registrants who obtained a physician's service got it without difficulty.
5. Two-thirds of the MAA patients continued to go to the doctor who had taken care of them before they went on the program.
6. The most frequently mentioned difficulty in securing private medical care was the rejection of the program by the physician. This occurred in 10 of the 86 cases studied.
7. It appears that more effective educational efforts aimed at the MAA registrants, members of his family, physicians and pharmacists would be helpful in the implementation of this program.

BALTIMORE HEALTH SURVEY
SPECIAL QUESTIONNAIRE - MEDICAL ASSISTANCE TO THE AGED (MAA)

INSTRUCTIONS: Interview _____ (MAA CLIENT).

If this person cannot answer you may interview another adult in the family to get this information about the MAA client.

(YOU) HAVE BEEN REGISTERED WITH THE MEDICAL ASSISTANCE TO THE AGED PROGRAM FOR SIX MONTHS OR MORE. NOW WE WOULD LIKE TO FIND OUT WHAT USE YOU HAVE MADE OF THE PROGRAM

A. May I see your MAA identification card? _____ (Write in personal number given on this card)

B. Since you registered and got this identification card, have you:

- | No | Yes | |
|----|-----|------|
| | | (54) |
| | | (55) |
| | | (56) |
| | | (57) |
| | | (58) |
1. Had any dental care?
 2. Been to a hospital medical care clinic?
 3. Had laboratory tests or X-ray?
 4. Received prescribed drugs or medical supplies?
 5. Been to a private physician?

C. If "no" to question B-5 ask;

1. Have you needed a private doctor since you registered?

☐ No

☐ Yes (59)

2. If yes, why haven't you seen one?

(60-61)

(STOP HERE)

D. If "yes" to question B-5 ask;

1. Did you have trouble getting a private doctor?

☐ No

☐ Yes (62)

2. If yes, what kind of trouble?

(63-64)

3. Do you now go to the same doctor who took care of you before you registered? ☐ No

☐ Yes

(65)

4. If no, why did you change?

(66-67)

BALTIMORE CITY HEALTH DEPARTMENT
RESEARCH AND PLANNING SECTION

QUARTERLY

STATISTICAL

REPORT

BIRTHS

MARRIAGES

MORBIDITY

MORTALITY

THIRD QUARTER 1962

FEBRUARY 8, 1963 Vol. 14 No. 3

BALTIMORE CITY HEALTH DEPARTMENT

ROBERT E. FARBER, M.D.

Commissioner

RESEARCH AND PLANNING SECTION

MATTHEW TAYBACK, Sc.D.

Assistant Commissioner of Health

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation."

Quetelet

Inquiries concerning the materials published, should be addressed to Mr. Todd M. Frazier, Director, Bureau of Biostatistics, Baltimore City Health Department, Baltimore 3, Maryland.

Table of Contents

	Page
A Summary of Vital Events	1 - 2
B Annual Rates by Month for Births and Selected Causes of Death	3
C Morbidity Rates by Month	4
D Average Morbidity Rates by Month	5
E Tables of Vital Events	6 - 9
I Marriages, Births, Deaths by Race	6
II Deaths From Selected Causes	7
III Cases and Deaths From Selected Causes and Infant Deaths by Health District	8
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths, Tuberculosis Hospital Admissions and Patients on Chemotherapy	9
F Births, Deaths and Cases by Health District, 1961	10 - 24
Eastern Health District	10 - 12
Western Health District	13 - 15
Druid Health District	16 - 18
Southeastern Health District	19 - 21
Southern Health District	22 - 24
G Population Estimate, Baltimore, Maryland - July 1, 1962	25 - 28



Vital Events - Baltimore, Maryland
January-September, 1962

Births

Resident births and birth rates continued to decline during the third quarter of 1962. For the period January-September there was a decrease of nearly 1,000 births from the experience for the same months during the past three years. Among white residents the birth rate for the period January-September was 19.2 births per 1,000 population, a decrease of 6 per cent from the average rate for 1959-1961. The nonwhite birth rate for these months in 1962 showed a drop of nearly 8 per cent from the comparable 1959-1961 figure.

Mortality

Deaths from all causes during the first nine months of 1962 numbered 8,556, for a rate of 12.3 per 1,000 population. This is nearly equal to the rate of 12.1, the average for the comparable months during the past three years. Diseases of the heart, cancer and vascular lesions of the central nervous system continued to account for two out of every three deaths among city residents. In the period January-September, 1962, there were 126 deaths from motor vehicle accidents compared to 98 for the past three years during the same months. This represents nearly a 30 per cent increase in the motor vehicle accident death rate, from 14.0 in 1959-1961 to 18.1 in 1962.

Infant and Maternal Mortality

Two maternal deaths occurred during the third quarter of 1962, giving a total of seven for the first nine months of the year, compared to six deaths the average for these months in the past three years.

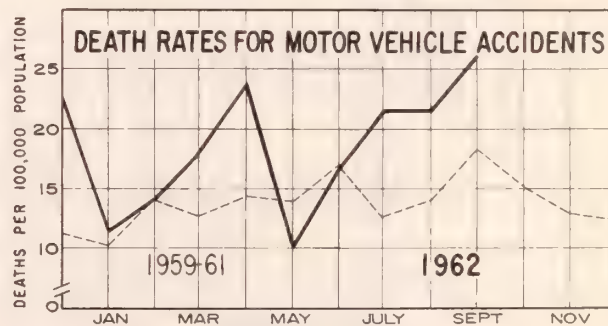
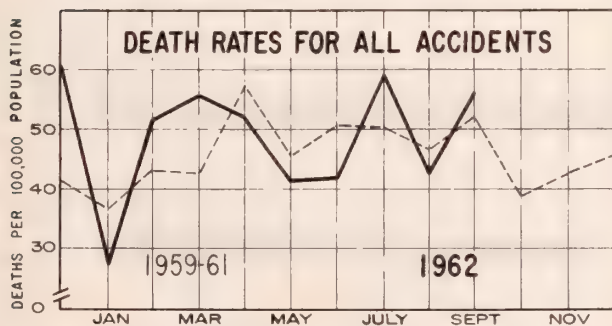
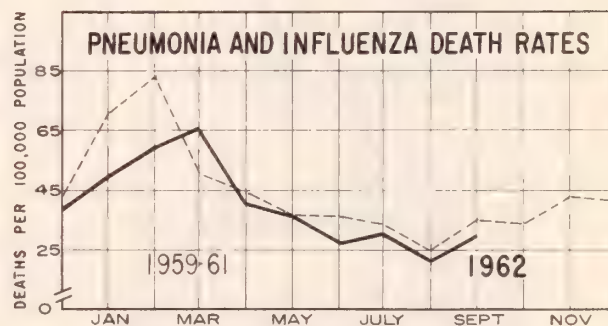
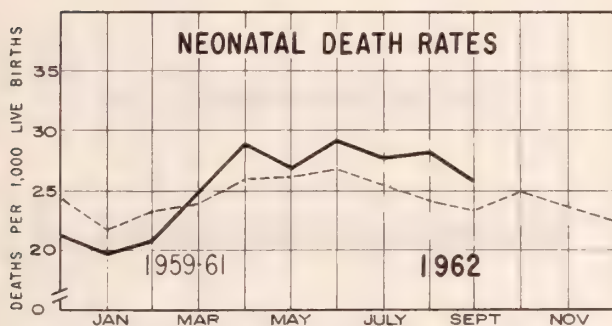
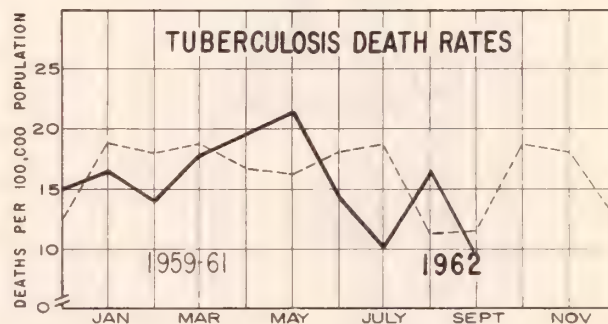
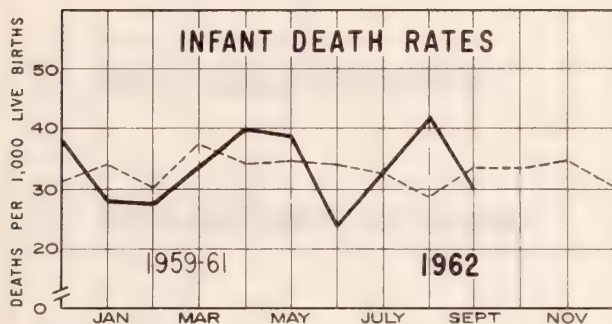
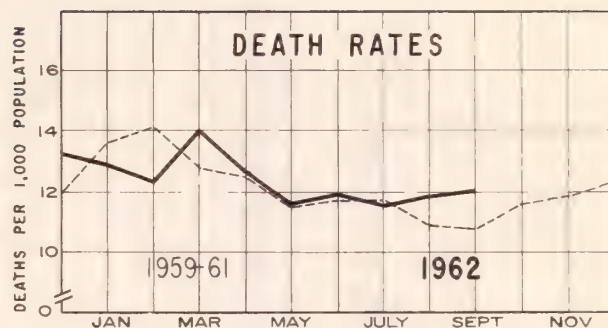
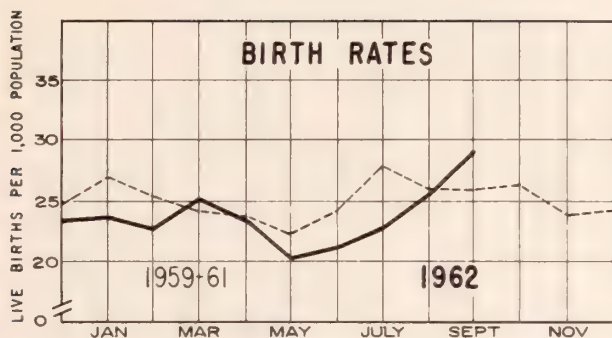
The infant mortality rate for both white and nonwhite showed an increase during the third quarter of 1962 but for the year to date this index is 33.0 deaths per 1,000 live births, nearly the same as the rate of 33.3 observed for the same months in the period 1959-1961.

Morbidity

Baltimore Health Survey results show that the first nine months of 1962 have had low rates of respiratory illness in comparison to the average of the years 1960 and 1961. (No respiratory disease rate is available for July, 1962 because during that month all interviews were conducted among persons enrolled in the Baltimore City Health Department Medical Care Program for Medical Assistance to the Aged.)

During the period January-September, 1962 there were no cases of paralytic or non-paralytic polio among city residents. This is a new record for Baltimore and if it continues we will observe our first year without a case of poliomyelitis.

Newly reported tuberculosis cases showed an increase of 19 or 3.3 per cent over the 577 reported for the first nine months of 1961. Deaths from tuberculosis decreased nearly 6 per cent from the 1961 level. The number of patients on chemotherapy continued to increase and these now number 2,359.



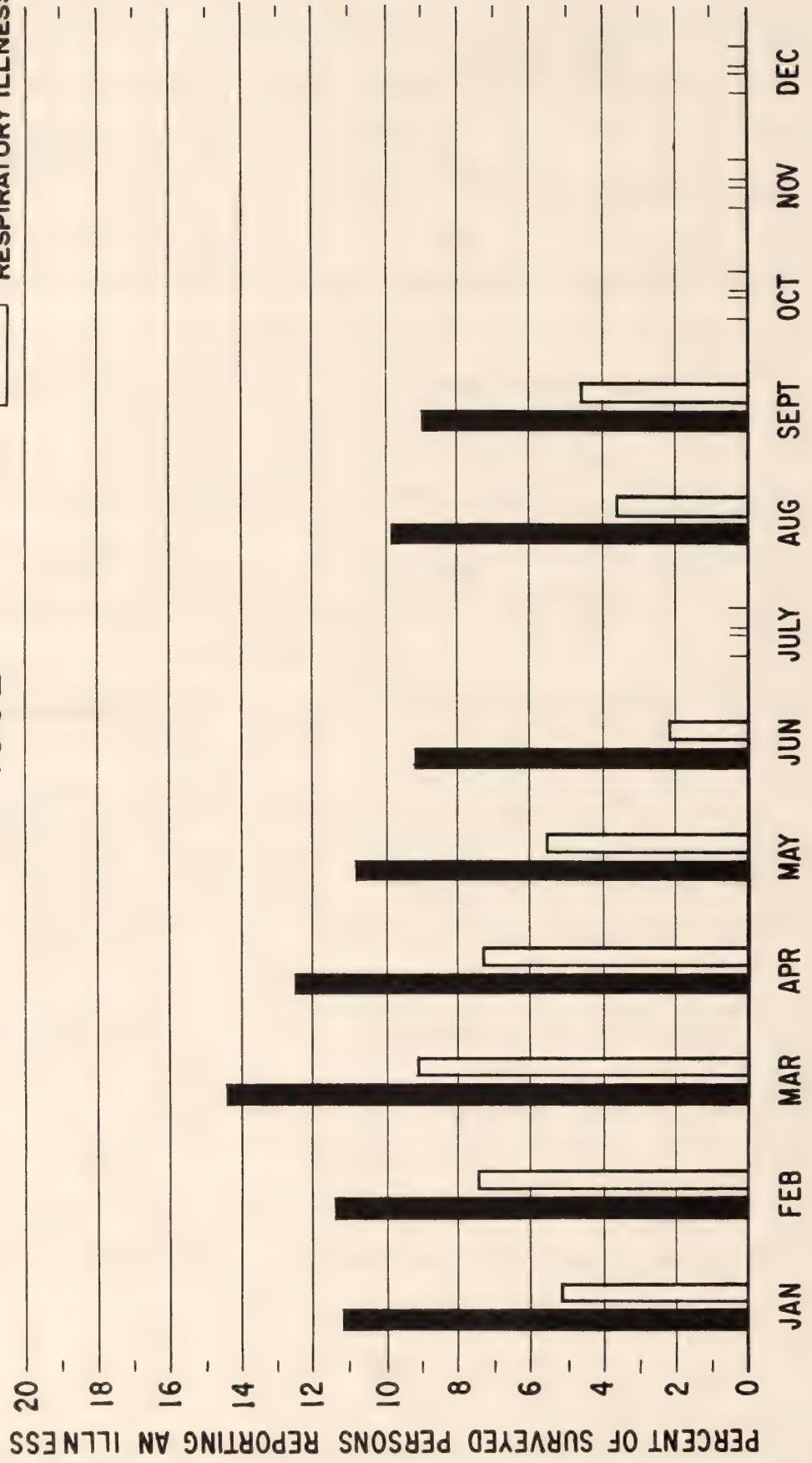
BALTIMORE CITY HEALTH DEPARTMENT

BALTIMORE HEALTH SURVEY

MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

1962

■ ALL ILLNESS
□ RESPIRATORY ILLNESS



BALTIMORE CITY HEALTH DEPARTMENT BALTIMORE HEALTH SURVEY

MORBIDITY DUE TO ACUTE RESPIRATORY ILLNESS
AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275 - 325 PERSONS) BY MONTH

□ AVERAGE 1960-1961
■ 1962

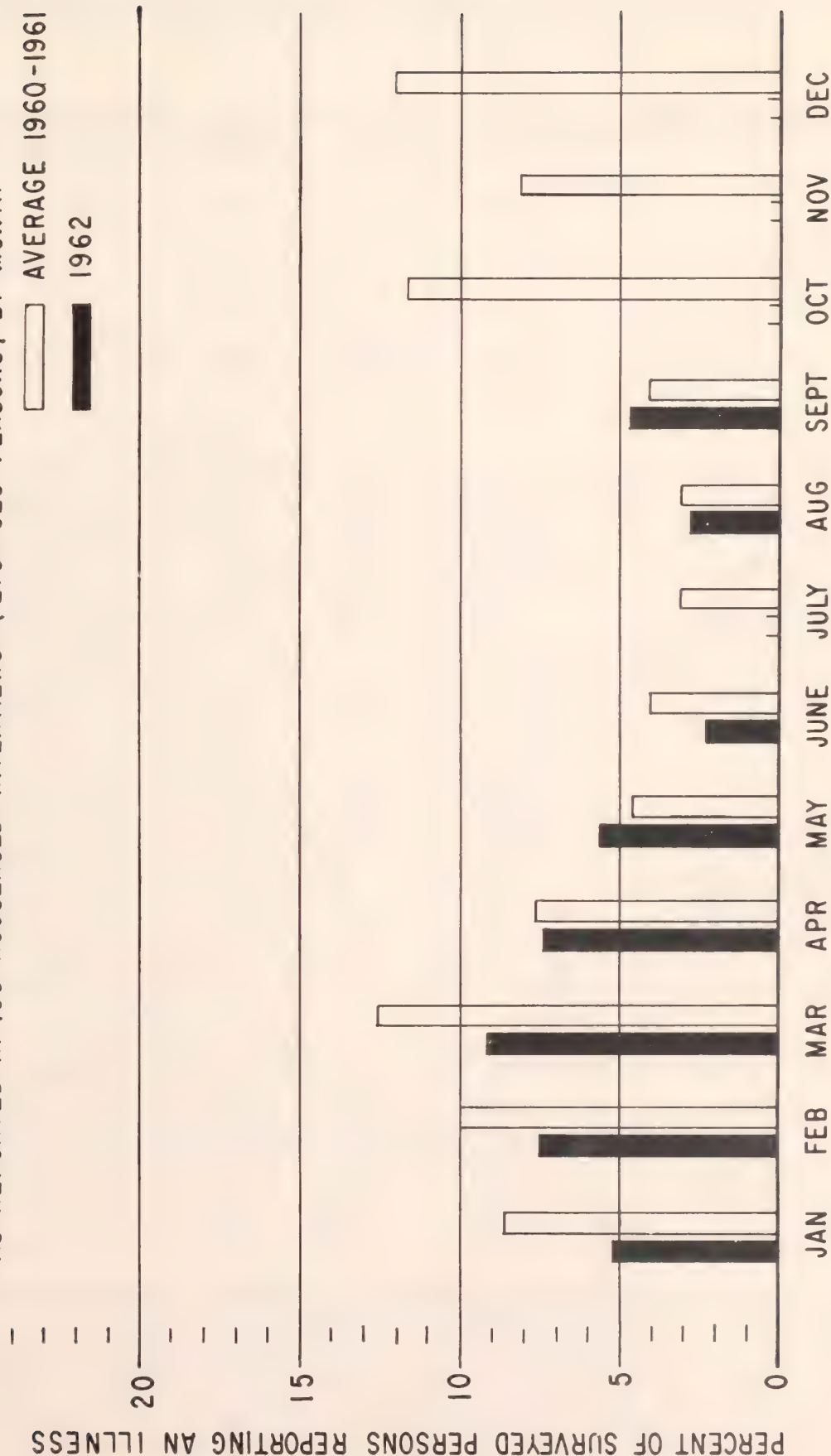


Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Third Quarter, 1962 and 1959-1961

Vital Event	JULY - SEPTEMBER				JANUARY - SEPTEMBER	
	Number		Rate*		Rate*	
	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61
	All Races					
Marriages Recorded.....	2,600	2,529	11.1	10.7	10.2	10.0
Births.....	6,080	6,248	25.9	26.4	23.8	25.0
Deaths, all causes.....	2,711	2,629	11.5	11.1	12.3	12.1
Deaths, under one year.....	212	198	34.9	31.7	33.0	33.3
under 28 days.....	172	151	28.3	24.2	25.3	24.5
28 days-11 months...	40	47	6.6	7.5	7.7	8.8
White						
Marriages Recorded.....	1,574	1,612	10.7	10.5	10.3	9.8
Births.....	3,079	3,237	20.9	21.1	19.2	20.0
Deaths, all causes.....	1,853	1,822	12.6	11.9	13.5	13.1
Deaths, under one year.....	81	76	26.3	23.5	26.5	25.2
under 28 days.....	70	57	22.7	17.6	21.4	18.5
28 days-11 months...	11	19	3.6	5.9	5.1	6.7
Nonwhite						
Marriages Recorded.....	1,026	917	11.7	11.1	10.0	10.4
Births.....	3,001	3,011	34.3	36.3	31.6	34.3
Deaths, all causes.....	858	807	9.8	9.7	10.2	10.3
Deaths, under one year.....	131	122	43.7	40.5	39.6	42.2
under 28 days.....	102	94	34.0	31.2	29.3	31.0
28 days-11 months...	29	28	9.7	9.3	10.3	11.2

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1962 total population 932,000; white 585,000; nonwhite 347,000. Population for period 1959-1961 was taken as the average mid year population for the three years as adjusted from the 1960 U. S. Census, i.e., total population 939,000; white 610,000; nonwhite 329,000.

Table II

Resident Deaths From Selected Causes
Third Quarter, 1962 and 1959-1961

Cause of Death	JULY - SEPTEMBER				JANUARY - SEPTEMBER	
	Number		Rate Per 100,000*		Rate Per 100,000*	
	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61
All Causes	2,711	2,629	11.5	11.1	12.3	12.1
Tuberculosis (001-019).....	26	33	11.1	13.9	15.2	16.5
Syphilis (020-029).....	3	5	1.3	2.1	3.6	3.1
Cancer (140-205).....	460	484	195.8	204.5	199.3	203.8
Diabetes mellitus (260).....	63	52	26.8	22.0	30.8	25.3
Vascular lesions of the central nervous system (330-334).....	211	205	89.8	86.6	85.6	93.8
Diseases of the heart (410-443)	1,063	1,070	452.5	452.1	525.2	507.5
Influenza and pneumonia (480-483, 490-493).....	65	73	27.7	30.8	39.0	45.0
Nephritis and nephrosis (590-594).....	26	18	11.1	7.6	9.2	9.3
Puerperal causes (640-652, 670-689).....	2	2	0.9	0.8	1.0	0.9
Congenital malformations (750-759).....	41	37	17.5	15.6	14.8	15.2
Certain diseases of early infancy (760-776).....	153	136	65.1	57.5	53.7	56.1
Suicides (963, 970-979).....	25	21	10.6	8.9	10.0	9.4
Homicides (964, 980-999).....	38	27	16.2	11.4	11.8	10.3
Accidents (800-802, 810-835, 840-962).....	124	114	52.8	48.2	48.3	46.6
Motor vehicles (810-835).....	54	34	23.0	14.4	18.1	14.0

*Rates shown for all causes are per 1,000 population

Table III

THIRD QUARTER, 1962 and 1959-1961 AVERAGE

CASES AND DEATHS FROM SELECTED CAUSES AND INFANT DEATHS BY HEALTH DISTRICTS

Cause of Illness and Death	*Total City		Eastern		Western		Druid		Southeastern		Southern	
	1962	AVERAGE 1959-61	1962	AVERAGE 1959-61	1962	AVERAGE 1959-61	1962	AVERAGE 1959-61	1962	AVERAGE 1959-61	1962	AVERAGE 1959-61
Infant deaths	212	198	67	57	62	48	42	49	28	22	10	13
Tuberculosis Cases	187	196	56	60	42	44	47	48	25	23	17	20
all forms Deaths	26	33	9	9	8	5	2	7	3	6	3	2
Typhoid Cases	1	1.7	0	0.7	0	0.3	1	0	0	0	0	0.7
fever Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria Cases	0	0	0	0	0	0	0	0	0	0	0	0
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Whooping Cases	5	38	1	10	0	9	2	12	2	6	0	1
cough Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Meningo- Cases	2	1.3	2	0	0	0.7	0	0.3	0	0.3	0	0
coccal Deaths	0	0.3	0	0.3	0	0	0	0	0	0	0	0
infections												
Measles Cases	86	155	43	41	10	23	8	48	14	26	11	17
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Acute polio- Cases	0	18	0	5	0	7	0	2	0	3	0	2
myelitis Deaths	0	0	0	0	0	0	0	0	0	0	0	0
(paralytic)												
Syphilis Cases	461	388	130	110	115	93	152	138	29	23	29	16
Deaths	3	5	0	1	0	1.3	0	1.7	1	1.7	2	0.3

All figures corrected for residence within Maryland.

*Totals include some intrastate transfers allocated to Baltimore City but not otherwise allocated to health districts.

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths, Tuberculosis Hospital Admissions
and Patients on Chemotherapy
Third Quarter, 1962 and 1961

	JULY - SEPTEMBER		JANUARY - SEPTEMBER	
	Total		Total	
	1962	1961	1962	1961
Newly Reported Cases.....	182	187	596	577
White.....	69	68	254	253
Nonwhite.....	113	119	342	324
Reported After Death.....	11	7	36	33
Number of Readmissions*.....	16	32	86	98
White.....	10	13	37	51
Nonwhite.....	6	19	49	47
Number of Tuberculosis Deaths.....	24	23	95	101
White.....	10	11	44	52
Nonwhite.....	14	12	51	49
Number of Patients Admitted to Tuberculosis Hospitals.....	223	189	642	583
Number of Patients on Chemotherapy September 30.....			2,359	1,845
Started in current year.....			732	634
Started prior to current year.....			1,627	1,211

*Reactivated Cases Readmitted to Current Register

Table 1

Resident Births
Eastern Health District, 1961

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	7,285	3,762	3,523
Hospital.....	7,168	3,748	3,420
Home.....	117	14	103
Private Physician.....	91	11	80
Midwife.....	14	1	13
Other.....	12	2	10

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Eastern Health District, 1961

Cause of Death	Total	White	Nonwhite
All Causes.....	3,620	2,795	825
Tuberculosis, all forms (001-019).....	35	21	14
Respiratory tuberculosis (001-008).....	33	21	12
Syphilis (020-029).....	10	4	6
Dysentery (045-048).....	..	..	..
Meningococcal infections (057).....	1	1	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	6	5	1
Acute poliomyelitis (080).....	1	..	1
Encephalitis (082-083).....	..	..	..
Other infective and parasitic diseases (110-138).....	..	..	..
Malignant neoplasms (140-205).....	582	473	109
Lymphatic and hematopoietic (200-205).....	44	34	10
Benign and unspecified neoplasms (210-239).....	22	14	8
Diabetes (260).....	78	60	18
Anemias (290-293).....	5	4	1
Other diseases of the blood and blood- forming organs (294-299).....	1	1	0
Vascular lesions of the central nervous system (330-334).....	271	196	75
Rheumatic fever (400-402).....	2	2	0

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Eastern Health District, 1961

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	1,636	1,375	261
Chronic rheumatic heart disease (410-416).....	45	36	9
Arteriosclerotic and degenerative heart disease (420-422).....	1,300	1,140	160
Other diseases of the heart (430-434).....	28	23	5
Hypertensive heart disease (440-443).....	263	176	87
Other hypertensive diseases (444-447).....	22	12	10
Arteriosclerosis (450).....	55	52	3
Other diseases of the circulatory system (451-468).....	53	36	17
Influenza and pneumonia (480-483, 490-493)	121	90	31
Pneumonia (490-493).....	121	90	31
Bronchitis (500-502).....	9	7	2
Ulcer of the stomach and duodenum (540-541).....	18	14	4
Appendicitis (550-553).....	3	1	2
Intestinal obstruction and hernia (560-570).....	17	12	5
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	12	11	1
Cirrhosis of the liver (581).....	57	37	20
Nephritis and nephrosis (590-594).....	28	17	11
Hyperplasia of prostate (610).....	8	6	2
Puerperal causes (640-689).....	4	1	3
Congenital malformations (750-759).....	37	23	14
Certain diseases of early infancy (760-776).....	138	60	78
Pneumonia of newborn (763).....	10	4	6
Diarrhea of newborn (764).....	..	..	..
Senility, ill-defined and unknown conditions (780-795).....	12	10	2
All other diseases.....	217	142	75
Accidents total (800-962, 965).....	107	72	35
Motor vehicle accidents (810-835).....	26	18	8
All other accidents.....	81	54	27
Suicides (963, 970-979).....	34	31	3
Homicides (964, 980-985).....	18	5	13

Table 3

Communicable Diseases Reported
Eastern Health District, 1961

Disease	Total	White	Nonwhite
Total.....	3,866	978	2,888
Chickenpox.....	224	119	105
Diphtheria.....	..	..	..
German measles.....	28	14	14
Gonococcal infections.....	1,888	80	1,808
Measles.....	794	454	340
Meningococcal infections.....	2	1	1
Mumps.....	73	47	26
Poliomyelitis, paralytic cases...	..	..	..
Scarlet fever.....	61	49	12
Syphilis.....	411	58	353
Tuberculosis, all forms.....	231	97	134
Typhoid fever.....	1	1	..
Whooping cough.....	20	7	13
All others.....	133	51	82

Table 1
Resident Births
Western Health District, 1961

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	5,092	1,843	3,249
Hospital.....	4,978	1,828	3,150
Home.....	114	15	99
Private Physician.....	82	13	69
Midwife.....	21	1	20
Other.....	11	1	10

Table 2
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Western Health District, 1961

Cause of Death	Total	White	Nonwhite
All Causes.....	2,329	1,373	956
Tuberculosis, all forms (001-019).....	39	19	20
Respiratory tuberculosis (001-008).....	35	18	17
Syphilis (020-029).....	3	1	2
Meningococcal infections (057).....	..	..	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	2	2	..
Encephalitis (082-083).....	..	..	..
Infectious hepatitis (092).....	2	..	2
Malignant neoplasms (140-205).....	351	221	130
Lymphatic and hematopoietic (200-205)....	28	20	8
Benign and unspecified neoplasms (210-239).....	5	4	1
Diabetes (260).....	46	29	17
Anemias (290-293).....	7	4	3
Other diseases of the blood and blood- forming organs (294-299).....	1	1	..
Vascular lesions of the central nervous system (330-334).....	190	112	78
Rheumatic fever (400-402).....	2	..	2

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Western Health District, 1961

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	964	631	333
Chronic rheumatic heart disease (410-416)..	17	15	2
Arteriosclerotic and degenerative heart disease (420-422).....	718	515	203
Other diseases of the heart (430-434).....	24	16	8
Hypertensive heart disease (440-443).....	205	85	120
Other hypertensive diseases (444-447).....	20	10	10
Arteriosclerosis (450).....	41	34	7
Other diseases of the circulatory system (451-468).....	27	16	11
Influenza and pneumonia (480-483, 490-493)...	67	33	34
Pneumonia (490-493).....	64	31	33
Bronchitis (500-502).....	10	6	4
Ulcer of the stomach and duodenum (540-541)..	8	6	2
Appendicitis (550-553).....	4	3	1
Intestinal obstruction and hernia (560-570)..	10	7	3
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	11	7	4
Cirrhosis of the liver (581).....	38	25	13
Nephritis and nephrosis (590-594).....	24	10	14
Hyperplasia of prostate (610).....	3	3	..
Puerperal causes (640-689).....	2	1	1
Congenital malformations (750-759).....	31	17	14
Certain diseases of early infancy (760-776).	132	29	103
Pneumonia of newborn (763).....	10	1	9
Diarrhea of newborn (764).....	..	..	..
Senility, ill-defined and unknown conditions (780-795).....	6	1	5
All other diseases.....	118	49	69
Accidents, total (800-962, 965).....	111	56	55
Motor vehicle accidents (810-835).....	30	10	20
All other accidents.....	81	46	35
Suicides (963, 970-979).....	33	31	2
Homicides (964, 980-985).....	23	5	18

Table 3

Communicable Diseases Reported
Western Health District, 1961

Disease	Total	White	Nonwhite
Total.....	2,554	376	2,178
Chickenpox.....	138	33	105
Diphtheria.....	..	..	..
German measles.....	20	7	13
Gonococcal infections.....	1,408	95	1,313
Measles.....	293	100	193
Meningococcal infections.....	2	..	2
Mumps.....	20	7	13
Poliomyelitis, paralytic cases....	..	..	..
Scarlet fever.....	30	19	11
Syphilis.....	392	33	359
Tuberculosis, all forms.....	162	51	111
Typhoid fever.....	..	..	..
Whooping cough.....	22	11	11
All others.....	67	20	47

Table 1
Resident Births
Druid Health District, 1961

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	4,872	1,629	3,243
Hospital.....	4,769	1,625	3,144
Home.....	103	4	99
Private Physician.....	88	2	86
Midwife.....	12	1	11
Other.....	3	1	2

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Druid Health District, 1961

Cause of Death	Total	White	Nonwhite
All Causes.....	2,759	1,380	1,379
Tuberculosis, all forms (001-019).....	36	7	29
Respiratory tuberculosis (001-008).....	32	7	25
Syphilis (020-029).....	10	..	10
Meningococcal infections (057).....	1	..	1
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	6	2	4
Encephalitis (082-083).....	..	..	..
Infectious hepatitis (092).....	1	..	1
Other infective and parasitic diseases (110-138).....	2	1	1
Malignant neoplasms (140-205).....	481	271	210
Lymphatic and hematopoietic (200-205).....	51	37	14
Benign and unspecified neoplasms (210-239).. <td>12</td> <td>7</td> <td>5</td>	12	7	5
Diabetes (260).....	54	34	20
Anemias (290-293).....	8	4	4
Other diseases of the blood and blood- forming organs (294-299).....	2	1	1
Vascular lesions of the central nervous system (330-334).....	205	97	108
Rheumatic fever (400-402).....	1	..	1

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
 Druid Health District, 1961

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	1,165	670	495
Chronic rheumatic heart disease (410-416).. <td>23</td> <td>15</td> <td>8</td>	23	15	8
Arteriosclerotic and degenerative heart disease (420-422).....	871	568	303
Other diseases of the heart (430-434).....	29	12	17
Hypertensive heart disease (440-443).....	242	75	167
Other hypertensive diseases (444-447).....	11	1	10
Arteriosclerosis (450).....	30	19	11
Other diseases of the circulatory system (451-468).....	39	14	25
Influenza and pneumonia (480-483, 490-493)...	86	28	58
Pneumonia (490-493).....	86	28	58
Bronchitis (500-502).....	6	4	2
Ulcer of the stomach and duodenum (540-541).. <td>16</td> <td>6</td> <td>10</td>	16	6	10
Appendicitis (550-553).....	3	..	3
Intestinal obstruction and hernia (560-570).. <td>25</td> <td>12</td> <td>13</td>	25	12	13
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	11	8	3
Cirrhosis of the liver (581).....	39	18	21
Nephritis and nephrosis (590-594).....	23	8	15
Hyperplasia of prostate (610).....	7	4	3
Puerperal causes (640-689).....	5	..	5
Congenital malformations (750-759).....	25	6	19
Certain diseases of early infancy (760-776).. <td>124</td> <td>24</td> <td>100</td>	124	24	100
Pneumonia of newborn (763).....	5	..	5
Diarrhea of newborn (764).....	1	..	1
Senility, ill-defined and unknown conditions (780-795).....	4	3	1
All other diseases.....	147	67	80
Accidents, total (800-962, 965).....	131	48	83
Motor vehicle accidents (810-835).....	36	16	20
All other accidents.....	95	32	63
Suicides (963, 970-979).....	14	11	3
Homicides (964, 980-985).....	30	5	25

Table 3

Communicable Diseases Reported
Druid Health District, 1961

Disease	Total	White	Nonwhite
Total.....	3,652	611	3,041
Chickenpox.....	139	62	77
Diphtheria.....	..	..	..
German measles.....	25	17	8
Gonococcal infections.....	2,128	106	2,022
Measles.....	529	262	267
Meningococcal infections.....	3	2	1
Mumps.....	25	14	11
Poliomyelitis, paralytic cases....	..	..	..
Scarlet fever.....	52	41	11
Syphilis.....	487	38	449
Tuberculosis, all forms.....	179	47	132
Typhoid fever.....	..	..	..
Whooping cough.....	19	6	13
All others.....	66	16	50

Table 1

Resident Births
Southeastern Health District, 1961

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	3,559	3,211	348
Hospital.....	3,529	3,198	331
Home.....	30	13	17
Private Physician.....	22	10	12
Midwife.....	8	3	5
Other.....	..	..	..

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southeastern Health District, 1961

Cause of Death	Total	White	Nonwhite
All Causes.....	1,613	1,483	130
Tuberculosis, all forms (001-019).....	24	17	7
Respiratory tuberculosis (001-008).....	23	17	6
Syphilis (020-029).....	4	3	1
Dysentery (045-048).....	..	..	..
Meningococcal infections (057).....	2	2	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	3	2	1
Encephalitis (082-083).....	..	..	..
Other infective and parasitic diseases (110-138).....	..	..	..
Malignant neoplasms (140-205).....	295	278	17
Lymphatic and hematopoietic (200-205).....	22	21	1
Benign and unspecified neoplasms (210-239).. <td>5</td> <td>5</td> <td>..</td>	5	5	..
Diabetes (260).....	38	36	2
Anemias (290-293).....	4	4	..
Other diseases of the blood and blood-forming organs (294-299).....	..	..	..
Vascular lesions of the central nervous system (330-334).....	96	86	10
Rheumatic fever (400-402).....	..	..	..

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southeastern Health District, 1961

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	735	695	40
Chronic rheumatic heart disease (410-416).....	27	26	1
Arteriosclerotic and degenerative heart disease (420-422).....	585	558	27
Other diseases of the heart (430-434).....	27	25	2
Hypertensive heart disease (440-443).....	96	86	10
Other hypertensive diseases (444-447).....	4	3	1
Arteriosclerosis (450).....	21	19	2
Other diseases of the circulatory system (451-468).....	19	17	2
Influenza and pneumonia (480-483, 490-493).....	44	40	4
Pneumonia (490-493).....	44	40	4
Bronchitis (500-502).....	5	5	..
Ulcer of the stomach and duodenum (540-541).....	4	3	1
Intestinal obstruction and hernia (560-570).....	7	6	1
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	3	2	1
Cirrhosis of the liver (581).....	33	32	1
Nephritis and nephrosis (590-594).....	8	6	2
Hyperplasia of prostate (610).....	6	5	1
Puerperal causes (640-689).....	..	..	..
Congenital malformations (750-759).....	15	14	1
Certain diseases of early infancy (760-776).....	62	49	13
Pneumonia of newborn (763).....	4	3	1
Senility, ill-defined and unknown conditions (780-793).....	6	6	..
All other diseases.....	80	70	10
Accidents, total (800-962, 965).....	56	48	8
Motor vehicle accidents (810-835).....	14	13	1
All other accidents.....	42	35	7
Suicides (963, 970-979).....	24	24	..
Homicides (964, 980-985).....	10	6	4

Table 3

Communicable Diseases Reported
Southeastern Health District, 1961

Disease	Total	White	Nonwhite
Total.....	1,174	883	291
Chickenpox.....	102	89	13
Diphtheria.....	..	..	..
German measles.....	44	41	3
Gonococcal infections.....	276	117	159
Measles.....	355	323	32
Meningococcal infections.....	4	4	0
Mumps.....	35	31	4
Poliomyelitis, paralytic cases....	1	1	0
Scarlet fever.....	58	57	1
Syphilis.....	110	64	46
Tuberculosis, all forms.....	110	93	17
Typhoid fever.....	..	..	..
Whooping cough.....	13	6	7
All others.....	66	57	9

Table 1
Resident Births
Southern Health District, 1961

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	2,338	1,492	846
Hospital.....	2,281	1,471	810
Home.....	57	21	36
Private Physician.....	52	20	32
Midwife.....	2	1	1
Other.....	3	0	3

Table 2
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southern Health District, 1961

Cause of Death	Total	White	Nonwhite
All Causes.....	805	654	151
Tuberculosis, all forms (001-019).....	12	9	3
Respiratory tuberculosis (001-008).....	12	9	3
Syphilis (020-029).....	1	1	..
Dysentery (045-048).....	..	..	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	1	1	..
Acute poliomyelitis (080).....	1	1	..
Infectious hepatitis (090).....	1	1	..
Malignant neoplasms (140-205).....	126	109	17
Lymphatic and hematopoietic (200-205)....	2	1	1
Benign and unspecified neoplasms (210-239).	3	3	..
Diabetes (260).....	23	22	1
Anemias (290-293).....	1	1	..
Vascular lesions of the central nervous system (330-334).....	65	59	6

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southern Health District, 1961

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	311	254	57
Chronic rheumatic heart disease (410-416)..	8	8	..
Arteriosclerotic and degenerative heart disease (420-422).....	243	206	37
Other diseases of the heart (430-434).....	6	5	1
Hypertensive heart disease (440-443).....	54	35	19
Other hypertensive diseases (444-447).....	2	2	..
Arteriosclerosis (450).....	11	11	..
Other diseases of the circulatory system (451-468).....	11	7	4
Influenza and pneumonia (480-483, 490-493)...	25	20	5
Pneumonia (490-493).....	25	20	5
Bronchitis (500-502).....	4	3	1
Ulcer of the stomach and duodenum (540-541)..	8	8	..
Appendicitis (550-553).....	2	2	..
Intestinal obstruction and hernia (560-570)..	1	..	1
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	..	..	..
Cirrhosis of the liver (581).....	20	19	1
Nephritis and nephrosis (590-594).....	10	5	5
Hyperplasia of prostate (610).....	1	1	..
Puerperal causes (640-689).....	1	1	..
Congenital malformations (750-759).....	18	11	7
Certain diseases of early infancy (760-776)..	46	27	19
Pneumonia of newborn (763).....	3	3	..
Senility, ill-defined and unknown conditions (780-795).....	1	1	..
All other diseases.....	50	40	10
Accidents, total (800-962, 965).....	35	28	7
Motor vehicle accidents (810-835).....	8	7	1
All other accidents.....	27	21	6
Suicides (963, 970-979).....	10	7	3
Homicides (964, 980-985).....	7	3	4

Table 3

Communicable Diseases Reported
Southern Health District, 1961

Disease	Total	White	Nonwhite
Total.....	619	263	356
Chickenpox.....	50	19	31
Diphtheria.....	..	..	..
German measles.....	7	6	1
Gonococcal infections.....	254	57	197
Measles.....	115	77	38
Meningococcal infections.....	..	..	..
Mumps.....	9	5	4
Poliomyelitis, paralytic cases....	1	0	1
Scarlet fever.....	9	4	5
Syphilis.....	76	32	44
Tuberculosis, all forms.....	66	41	25
Typhoid fever.....	1	0	1
Whooping cough.....	1	1	0
All others.....	30	21	9

Population Estimate - Baltimore, Maryland
July 1, 1962

The estimated July 1, 1962 population of Baltimore is 932,202, the total of 585,547 white and 346,655 nonwhite residents. This represents a decrease of 6,822 persons from the 1960 Census count of 939,024 persons or a 0.7 per cent decrease in 2 years.

Population change is determined by the number of births, deaths and persons moving to and from the city during the year. Births and deaths are counted from the birth and death certificates issued during the year, but the number of people moving to or out of the city cannot be counted directly. Estimates of the net movement during the year are made from data believed to be indicative of the actual changes taking place. In part, migration estimates used this year were based on information obtained from the Baltimore Health Survey.¹ The components used in determining the July 1, 1962 population are shown below.

Components of the 1962 Population Estimate

<u>Component</u>	<u>Total</u>	<u>White</u>	<u>Nonwhite</u>
Population - July 1, 1961*	935,896	596,563	339,333
Births, July 1, 1961-June 30, 1962	22,474	11,452	11,022
Deaths, July 1, 1961-June 30, 1962	11,110	7,614	3,496
Estimated Net Migration	-15,058	-14,854	- 204
Population - July 1, 1962	932,202	585,547	346,655

*Revised estimate based on additional migration information.

¹Tayback, M. and Frazier, T. M.: Continuous Health Surveys a Necessity for Health Administration. Public Health Reports, Volume 77, Number 9, September, 1962.

The 1962 population estimate of 932,202 shows a loss of 3,694 persons to the city since the revised 1961 estimate. This represents the excess of out-migration over the natural increase. The white population decreased by 11,016 persons, with migration out of the city causing a loss of 14,854 persons while 3,838 persons were gained as a result of natural increase. This year, for the first time since migration estimates have been determined, a net movement of nonwhite population from the city was noted. The estimated net out-migration of nonwhite persons was 204 persons, a small figure but nevertheless significant in that it shows a reversal of a trend. During the past few years, however, nonwhite in-migration has been almost negligible; the increase in nonwhite population has been almost entirely to natural increase. The 1962 estimated nonwhite population of 346,655 shows an increase of 7,322 persons resulting entirely from natural increase.

Age Distribution

Table 1 shows the age distribution of the 1962 estimated population by race. The change in the population according to broad age groups and race since the 1960 Census count is shown in Table 2.

Inspection of Table 2 reveals that since the 1960 Census:

1. The total population under 20 years of age has increased by 7,587 persons. The nonwhite population in this age group has increased by 13,127 or 9.1 per cent during this period of about two years.
2. The population aged 20-64 years, the primary source of the resident labor force has decreased by 17,856 persons or 6 per cent.
3. The population 65 years of age and over has increased to 88,314 persons, an increase of 4.1 per cent.

Table 1

Estimated Population by Age and Race
Baltimore - 1962

Age Group	Total	White	Nonwhite
All Ages	932,202	585,547	346,655
Under 5	103,908	52,895	51,013
5 - 9	91,437	48,218	43,219
10 - 14	82,461	46,255	36,206
15 - 19	69,212	41,928	27,284
20 - 24	55,733	33,694	22,039
25 - 29	52,860	30,775	22,085
30 - 34	57,389	33,608	23,781
35 - 39	63,292	38,792	24,500
40 - 44	63,010	40,655	22,355
45 - 49	59,932	40,671	19,261
50 - 54	54,325	38,646	15,679
55 - 59	48,601	35,607	12,994
60 - 64	41,728	32,005	9,723
65 - 69	33,958	27,118	6,840
70 - 74	25,176	20,590	4,586
75 - 79	15,978	13,237	2,741
80 - 84	8,646	7,248	1,398
85 and over	4,556	3,605	951

Table 2

Population Change by Race and Age Group
1960 Census - 1962

Total				
Age	1960 Census	1962	Change	Per Cent Change
All Ages	939,024	932,202	+ 6,822	- 0.7
20	339,431	347,018	+ 7,587	+ 2.2
20 - 44	308,476	292,284	-16,192	- 5.2
45 - 64	206,250	204,586	- 1,664	- 0.8
65 +	84,867	88,314	+ 3,447	+ 4.1
White				
All Ages	610,595	585,547	-25,048	- 4.1
20	194,836	189,296	- 5,540	- 2.8
20 - 44	194,491	177,524	-16,967	- 8.7
45 - 64	151,560	146,929	- 4,631	- 3.1
65 +	69,708	71,798	+ 2,090	+ 3.0
Nonwhite				
All Ages	328,429	346,655	+18,226	+ 5.5
20	144,595	157,722	+13,127	+ 9.1
20 - 44	113,985	114,760	+ 775	+ 0.7
45 - 64	54,690	57,657	+ 2,967	+ 5.4
65 +	15,159	16,516	+ 1,357	+ 9.0

BALTIMORE CITY HEALTH DEPARTMENT
RESEARCH AND PLANNING SECTION

QUARTERLY

STATISTICAL

REPORT

MARRIAGES

BIRTHS

MORTALITY

MORBIDITY

FOURTH QUARTER 1962

MARCH 29, 1963 VOL. 14 NO. 4

BALTIMORE CITY HEALTH DEPARTMENT

ROBERT E. FARBER, M.D.
Commissioner

RESEARCH AND PLANNING SECTION

MATTHEW TAYBACK, Sc.D.
Assistant Commissioner of Health

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation."

Quetelet

Inquiries concerning the materials published, should be addressed to Mr. Todd M. Frazier, Director, Bureau of Biostatistics, Baltimore City Health Department, Baltimore 3, Maryland.

TABLE OF CONTENTS

	Page
A Summary of Vital Events	1- 8
B Annual Rates by Month for Births and Selected Causes of Death	9
C Morbidity Rates by Month	10
D Average Morbidity Rates by Month	11
E Tables of Vital Events	12-15
I Marriages, Births, Deaths by Race	12
II Deaths From Selected Causes	13
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	14
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths and Tuberculosis Hospital Admissions	15
F Extent of Verification of Polio and DPT Vaccinations in the Baltimore Health Survey	16-25



BALTIMORE'S HEALTH RECORD FOR 1962

The residents of Baltimore City declined by 5,000 during the year interval July 1, 1961 - June 30, 1962. The white population dropped from 599,000 to 585,000 a loss of 14,000, while nonwhite residents increased by 9,000, i.e., from 338,000 to 347,000 or 37 per cent of the total of 932,000. This is a pattern which has been in progress since 1956, characterized by substantial net outmigration of white residents and substantial net immigration of nonwhite persons, primarily from the south. There is evidence that this pattern may be undergoing some modification. During the past three years, the rate of immigration of families from the south has diminished perceptibly and it is believed that in recent months more nonwhite families have left than have moved into the city. The effect of this new development combined with other opportunities for out-of-city residence for middle income nonwhite families may accentuate the population decline. The cessation of the net immigration from the south is believed to result from a drop in absolute numbers of the job opportunities for non skilled workers in the Baltimore metropolitan area. This situation is not apt to improve in the face of increasing efforts at automation.

Maternal and Child Health

A sharp decline in live births occurred in Baltimore City during 1962. The recent record in this respect is shown in the table below.

<u>Year</u>	<u>Total Recorded Births</u>	<u>Resident Births</u>
1957	39,680	25,067
1958	39,344	24,464
1959	38,855	23,893
1960	38,410	23,262
1961	38,130	23,153
1962	36,222	22,223

For reasons not completely understood the number of live births to residents of the metropolitan area dropped nine per cent in 1962. The most likely explanation lies in (a) the recent decline in the marriage rate (b) acceleration of fertility in the early 1950's and (c) a slow return to lower fertility patterns characteristic of the late 1940's.

The decline of 12 per cent or 3,000 in the number of live births within the past six years among residents of Baltimore City is partly due to a substantial outmigration of white families in the child-bearing age range. In addition, the factors noted above have also operated. Some of the implications of this drop are (1) reduction in the demand and need for obstetrical beds (2) reduction in the need for pediatric facilities (3) stabilization and some reduction of the number of new kindergarten and first grade classes from that needed to meet the requirements of the peak 1957 cohort of children who have now entered kindergarten.

In spite of considerable difficulty in motivating many mothers in underprivileged circumstances to seek early prenatal care, it is still possible to attain a respectable record in the matter of maternal mortality. In 1962, there were eleven maternal deaths or a rate of five maternal deaths per 10,000 live births. Among mothers who seek prenatal care early in pregnancy and cooperate with the attending obstetrician this risk can be reduced to one or two per 10,000 live births. On the other hand, in the absence of the excellent obstetrical services available in this city during the delivery and post-partum period the maternal death rate could rise to ten-fold what it is at present.

Infant Mortality

In spite of difficult social and economic circumstances faced by many child bearing women, modern medicine can protect them against the risk of maternal death. The task is more difficult in protecting the life of the newborn infant.

In 1962 the infant mortality rate for white infants rose from 24.9 infant deaths per 1,000 live born to 26.7 and for nonwhite infants the rate of death continued at the disturbingly high level of 39.9.

The white infant death rate was exceeded only once in the past twelve years. The most likely explanation for the rise is the increase in the number of mothers in underprivileged economic and social circumstances who are now residents in the city. Support for this statement lies in the close correlation which exists between social and economic position of the mother and the survivorship of a newborn infant. Here in Baltimore City, for example, babies born to mothers in the lowest economic fifth have a risk of dying in the first year of life which is 80 per cent higher than that experienced by babies born to mothers who are in the highest economic fifth of the city. By way of understanding what can be achieved under optimal circumstances, it is of interest to note that infant mortality rates in the range 15-17 per 1,000 live born are reported in the Scandanavian countries. If infants born to Baltimore mothers experienced this latter rate rather than that actually recorded in 1962 (33.3 per 1,000) half of the infant deaths would have been prevented, or stated otherwise, 370 infants who died would have survived. One cannot be satisfied with this state of affairs.

Tuberculosis

For many years, Baltimore has had a comparatively high tuberculosis incidence. In 1960, the U. S. Public Health Service listed this city as first among the major cities in respect to its tuberculosis case rate, which then was 84.3 new cases per 100,000 population. In spite of vigorous control efforts this disease continues to give ground grudgingly. Thus during 1962, a total of 780 new cases was reported among city residents, an increase of four per cent above the reported number of 749 for 1961. To some extent the high level of tuberculosis here is associated with the concentration of the problem among Negro residents. For instance the case rate for Negro residents during 1962 was 132 per 100,000 compared with 55 for white residents. Deaths due to tuberculosis declined from 148 in 1961 to 133 in 1962. Although the struggle against this disease is difficult and disappointing at times, it is well to recall, however, the vast changes which have come about since the introduction of chemotherapy and antibiotic agents. Twenty years ago, tuberculosis was a leading cause of death accounting for a loss of approximately 800 lives yearly.

Accidents

During 1961 there was a decline in the number of automobile accidents and in the number of deaths due to such accidents when compared with the record for 1960. In view of the introduction of the State administered penalty point system on January 1, 1961 it was not unreasonable to attribute some of the decline to the new control measure. However, we were inclined to warn that the 1961 decline was probably due to unusually severe weather early in that year interfering substantially with any use of automobiles.

The record of automobile accidents, injuries and deaths in 1962 for Baltimore residents is not a favorable one. Comparative data are shown below.

Motor Vehicle Accidents Occurring in Baltimore City

<u>Year</u>	<u>Accidents Reported</u>	<u>Persons Injured</u>	<u>Persons Killed</u>
1962 (est.)	18,450	8,700	110
1961	17,535	8,237	91
1960	18,292	8,257	110
1959	18,006	8,685	106
1958	16,650	7,625	112

New high records have been established in the number of reported automobile accidents and in the number of persons injured. The number of persons killed was at a near maximum. It is natural to react vigorously to these facts and to demand further control measures.

In this connection the thesis has been advanced that compulsory mechanical inspection of vehicles should be a condition for licensure. Presumably, if many accidents which cause injuries and deaths were due to mechanical defects, inspection would prevent a substantial number of such incidents. However, there is little evidence that mechanical defects enter as an important cause of accidents. Speeding, driving under the influence of alcohol and poor driver or pedestrian judgment are the underlying factors, most experts agree. Before a substantial public investment is made in supervised vehicle inspection by the passage of appropriate legislation, it would be useful to determine whether the funds to be expended for mandatory vehicle inspection might produce more results in lives saved and injuries prevented if used for improved law enforcement through increased highway patrols.

Venereal Diseases

The number of infectious cases of syphilis reported to the City Health Department during 1962 was 390, about the same incidence as in 1961 when the equivalent statistic was 381. This represents a three-fold increase over the low level of 122 which was reached in 1954 and is a trend particularly alarming because of its association with homosexuality and with promiscuity among teenagers. By contrast, while the reported incidence of infectious syphilis has increased in recent years, suggesting increased promiscuity, the reported incidence of gonorrhea has declined. The significance of this contradiction in trends is not well understood. The relevant figures are shown below.

<u>Year</u>	<u>Infectious Syphilis</u>	<u>Reported Cases of Gonorrhea</u>
1962	390	5,006
1961	381	5,962
1960	269	6,179
1959	196	6,743
1958	193	6,884

The reported gonorrhea level of 1962 is the lowest since 1946 when, with the introduction of penicillin, a sharp increase took place in the number of cases which came to official notice.

Other Communicable Diseases

A year with no cases of diphtheria, tetanus nor of poliomyelitis, and with a low incidence of whooping cough, is the solid, totally effective, end result of the practical products of basic research in immunology and the public's education in their use. For the record, it is of interest to note that the eradication of paralytic poliomyelitis in 1962 was the result of wide inoculation of the child population with the Salk vaccine. The oral

vaccine, simpler to administer, and with more desirable immunological characteristics will gradually replace the Salk vaccine and increase the probability of wiping out poliomyelitis.

Acute respiratory disease--colds, flu, grippe, virus--was present in the city in peak frequency during the first three months and the last three months of 1962. However, the prevalence of illness due to respiratory disease was considered to be well below that which is experienced when influenza is present in epidemic form. With the continuous improvement of polyvalent influenza vaccine and with proposed improvements in disease surveillance methods it should be possible to avoid future serious outbreaks of respiratory disease due to influenza.

Principal Causes of Death

The chief causes of loss of life vary little from one year to another. In 1962 cardiovascular diseases accounted for fifty per cent of total deaths while cancer was the cause of sixteen per cent of deaths. Congenital malformations and other diseases of infancy, accidents, pneumonia, and diabetes were other important causes of death.

With present scientific knowledge it is possible to reduce significantly the 300 lives lost to lung cancer and the 70 lives lost annually because of cancer of the cervix. In the instance of lung cancer the weight of evidence points to heavy smoking as a principal cause. The young adult has it within his own power to minimize the risk of lung cancer by avoiding smoking, or if that is difficult by smoking in moderation. How simple and economical this path is, contrasted with the expensive and complex attempts to minimize atmospheric pollution with less to be gained in health promotion than that which would follow individual discipline in respect to smoking.

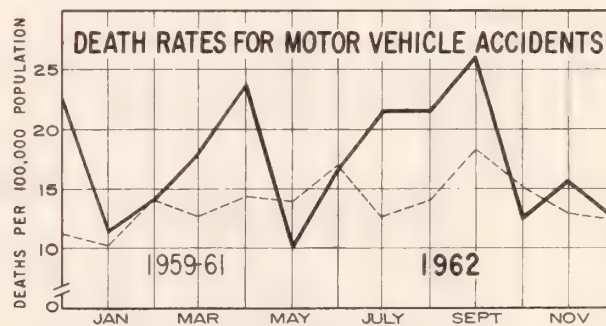
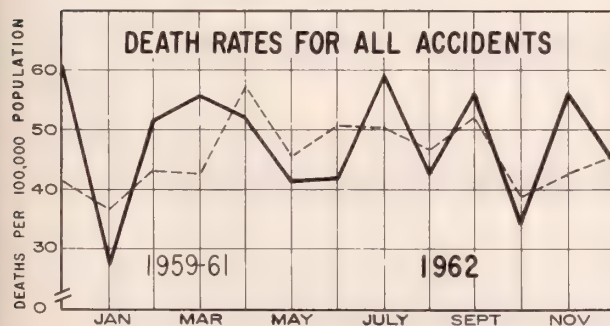
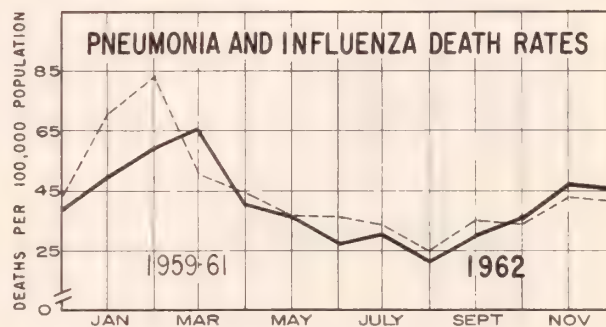
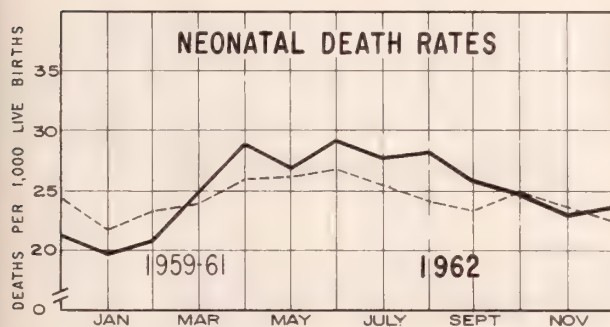
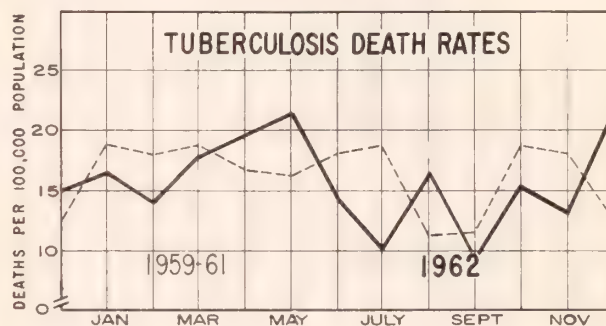
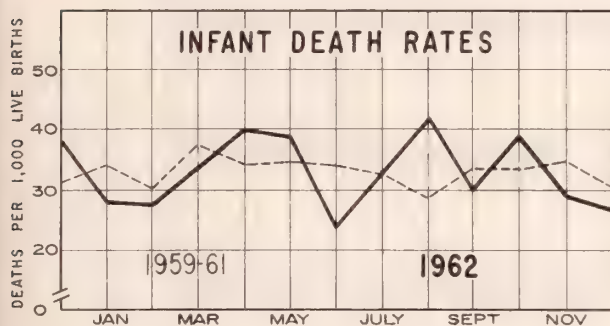
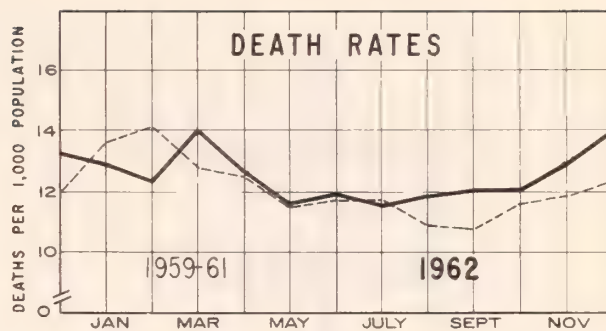
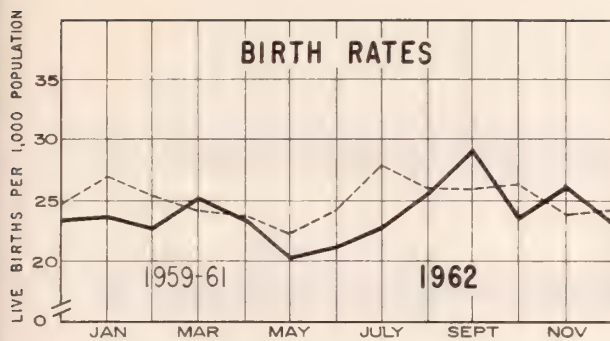
Conclusion

There were no dramatic outbreaks of disease in 1962. Effective control was maintained over the preventable communicable diseases, and for the first time in the recorded public health history no case of paralytic poliomyelitis was reported. However, that which remains to be done is of more consequence than that which has been done.

The events of 1962 point up the need to improve the circumstances under which babies are born. Many of Baltimore's mothers fail to secure adequate prenatal care. Many, indeed, because of their social circumstances are in a poor position to bear or rear children. The action required under these circumstances involves educational and social workers as well as health and medical personnel.

Tuberculosis continues to attack substantial numbers of Baltimore residents, primarily in areas characterized by deprived social and economic circumstances. Here again social and economic amelioration will be necessary to significantly alter the long range trend of this disease.

The toll of disability and lives lost as a result of automobile accidents, sharply up from the prior year, is serving as a reason for demands for further control measures. If an additional public investment is to be made in automobile safety, common sense dictates that alternative control measures should be considered with preference given to that program which can produce maximum benefit.



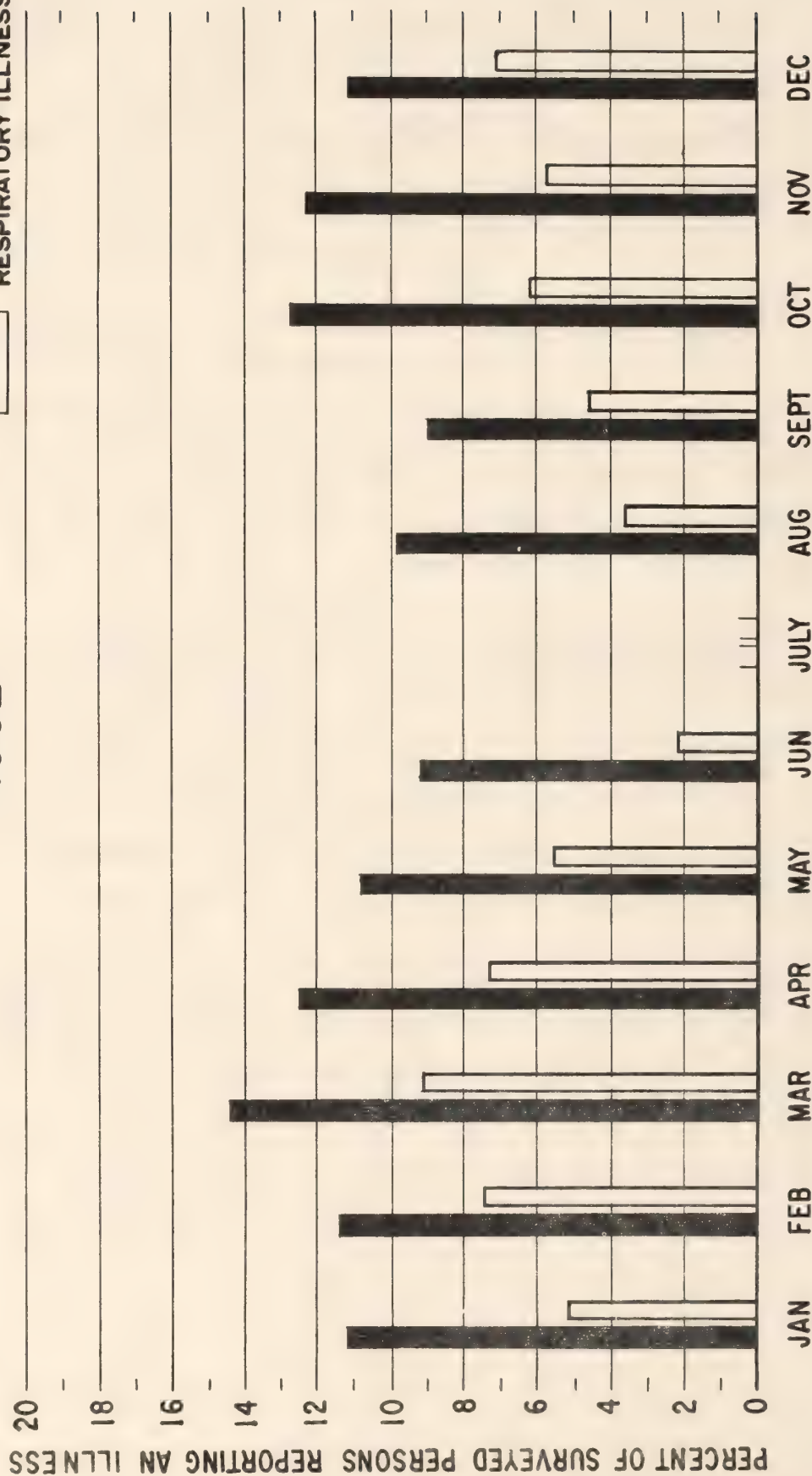
BALTIMORE CITY HEALTH DEPARTMENT

BALTIMORE HEALTH SURVEY

MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275 - 325 PERSONS) BY MONTH

1962

ALL ILLNESS
RESPIRATORY ILLNESS



BALTIMORE CITY HEALTH DEPARTMENT
BALTIMORE HEALTH SURVEY

MORBIDITY DUE TO ACUTE RESPIRATORY ILLNESS
AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

□ AVERAGE 1960-1961
■ 1962

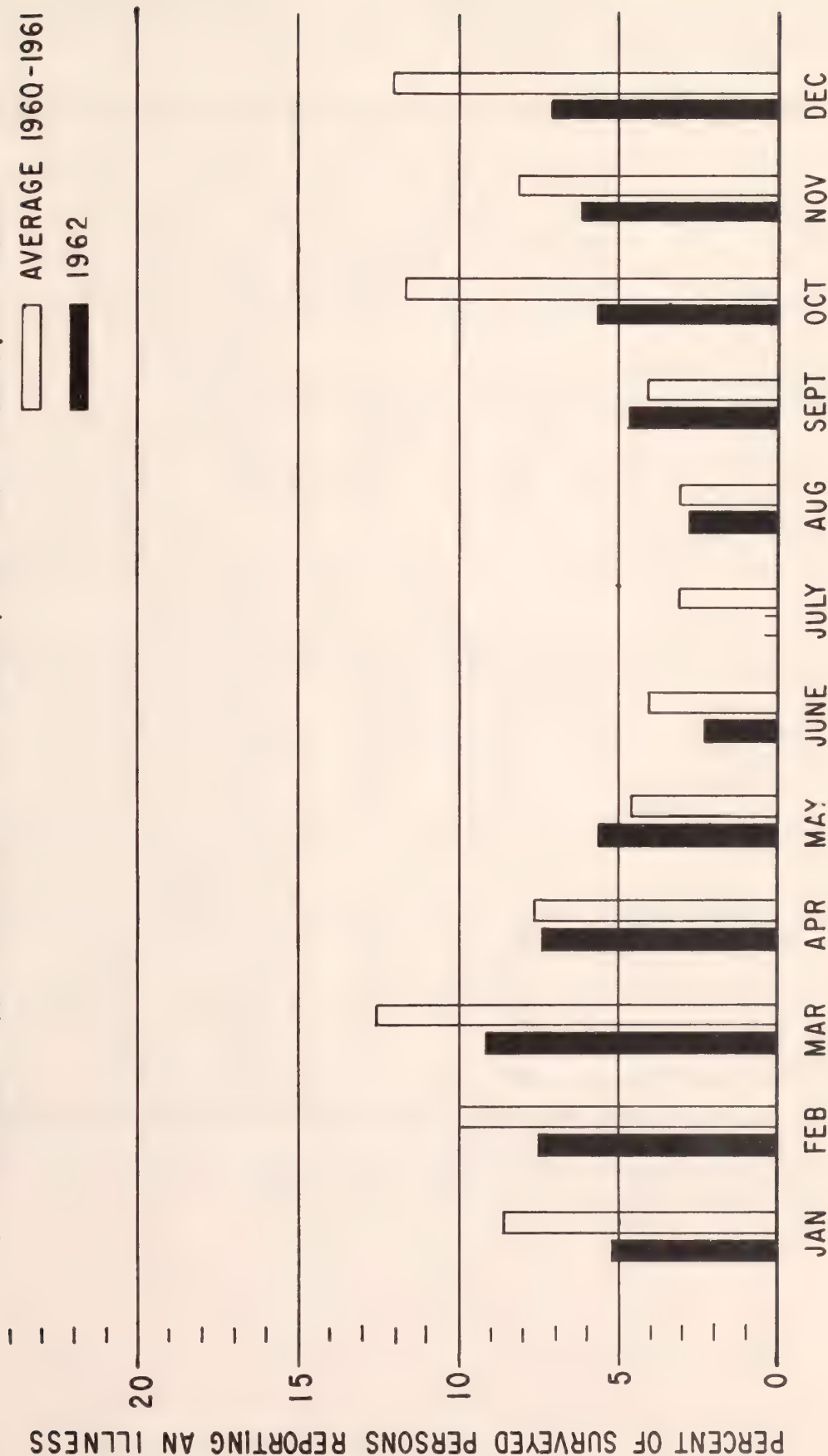


TABLE I

MARRIAGES RECORDED, RESIDENT BIRTHS, DEATHS AND INFANT DEATHS
AND CORRESPONDING RATES BY RACE: FOURTH QUARTER, 1962 AND 1959-1961

Vital Event	October-December				January-December	
	Number		Rate*		Rate*	
	1962	Average 1959-1961	1962	Average 1959-1961	1962	Average 1959-1961
ALL RACES						
Marriages recorded.....	2,274	2,278	9.7	9.6	10.1	9.9
Births.....	5,702	5,816	24.3	24.6	23.9	24.9
Deaths, all causes.....	3,053	2,802	13.0	11.8	12.5	12.1
Deaths, under one year....	179	198	31.4	34.0	32.6	33.5
under 28 days.....	131	138	23.0	23.7	24.7	24.3
28 days-11 months.	48	60	8.4	10.3	7.9	9.2
WHITE						
Marriages recorded.....	1,474	1,398	10.0	9.1	10.3	9.6
Births.....	2,924	3,023	19.8	19.7	19.4	19.9
Deaths, all causes.....	2,124	1,970	14.4	12.8	13.7	13.0
Deaths, under one year....	71	77	24.3	25.5	25.9	25.3
under 28 days.....	58	57	19.8	18.9	21.0	18.6
28 days-11 months.	13	20	4.5	6.6	4.9	6.7
NONWHITE						
Marriages recorded.....	800	880	9.1	10.6	9.8	10.4
Births.....	2,778	2,793	31.8	33.7	31.6	34.1
Deaths, all causes.....	929	832	10.6	10.0	10.3	10.3
Deaths, under one year....	108	121	38.9	43.3	39.4	42.5
under 28 days.....	73	81	26.3	29.0	28.5	30.5
28 days-11 months.	35	40	12.6	14.3	10.9	12.0

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1962. Total, 932,000; White, 585,000; Nonwhite, 347,000.

TABLE II

RESIDENT DEATHS FROM SELECTED CAUSES
FOURTH QUARTER, 1962 AND 1959-1961

Cause of Death	October-December				January-December	
	Number		Rate per 100,000*		Rate per 100,000*	
	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61
All Causes	3,053	2,802	13.0	11.8	12.5	12.1
Tuberculosis (001-019).....	39	39	16.6	16.5	15.6	16.8
Cholera (020-029).....	4	8	1.7	3.4	3.1	3.2
Cancer (140-205)	467	449	198.8	189.7	199.1	200.2
Diabetes Mellitus (260).....	67	61	28.5	25.8	30.3	25.5
Cerebral Lesions of the Central Nervous System (330-334)	230	212	97.9	89.6	88.7	92.9
Diseases of the Heart (410-443).....	1,337	1,208	569.1	510.4	536.9	508.2
Influenza and Pneumonia (480-483, 490-493).....	101	89	43.0	37.6	40.0	43.2
Nephritis and Nephrosis (590-594).....	23	24	9.8	10.1	9.3	9.5
Perinatal Causes (640-652, 670-689).....	2	2	0.9	0.8	1.0	0.9
Congenital Malformations (750-759).....	31	32	13.2	13.5	14.4	14.8
Certain Diseases of Early Infancy (760-776).....	119	126	50.7	53.2	52.9	55.5
Accidents (963, 970-979).....	21	23	8.9	9.7	9.8	9.5
Homicides (964, 980-999).....	23	22	9.8	9.3	11.3	9.9
Undetermined Cause (800-802, 810-835, 840-962).	106	89	45.1	37.6	36.8	44.3
Motor Vehicle (810-835).....	32	33	13.6	13.9	17.0	14.2

*Rates shown for all causes are per 1,000 population.

TABLE III

CASES AND DEATHS FROM SELECTED CAUSES, AND INFANT DEATHS BY HEALTH DISTRICTS
FOURTH QUARTER, 1962 AND 1959-1961 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Western		Druid		Southeastern		Southern	
	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61	1962	Average 1959-61
Infant deaths	179	198	61	66	32	43	47	50	19	25	18	21
Tuberculosis, All forms	184 39	181 39	64 11	50 9	32 7	36 7	53 9	52 13	26 8	24 5	9 5	19 4
Syphilis	414 8	387 8.7	103 5	96 4	97 1	102 1	133 1	132 2	36 1	27 0.7	36 0	24 1
Typhoid fever	0	0.6	0	0.3	0	0	0	0	0	0	0	0.3
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Whooping cough	6	22	5	8	0	3	1	5	0	3	0	2
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Meningococcal infections	1	1.7	1	0.3	0	0.7	0	0	0	0.7	0	0
Deaths	1	1	0	0.3	0	0.3	0	0	1	0.3	0	0
Measles	28	166	19	41	0	48	5	40	2	29	2	8
Cases	0	0	0	0	0	0	0	0	0	0	0	0
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Acute polio- myelitis (paralytic)	0	20	0	7	0	2	0	3	0	4	0	4
Deaths	0	1.3	0	0.3	0	0	0	0	0	1	0	0

All figures corrected for residence within Maryland

*Totals include some intranfers allocated to Baltimore City but not otherwise allocated to health districts.

TABLE IV

NEWLY REPORTED AND REACTIVATED CASES OF TUBERCULOSIS,
TUBERCULOSIS DEATHS AND TUBERCULOSIS HOSPITAL ADMISSIONS
FOURTH QUARTER 1962 AND 1961

	OCTOBER-DECEMBER		JANUARY-DECEMBER	
	Total		Total	
	1962	1961	1962	1961
Newly Reported Cases.....	184	172	780	749
White.....	69	77	323	330
Nonwhite.....	115	95	457	419
Reported After Death.....	15	13	51	46
Number of Readmissions*.....	23	25	109	123
White.....	16	15	53	66
Nonwhite.....	7	10	56	57
Number of Tuberculosis Deaths**.	38	47	133	148
White.....	23	23	67	75
Nonwhite.....	15	24	66	73
Number of Patients Admitted to Tuberculosis Hospitals.....	171	160	813	742
Number of Patients on Chemotherapy December 31.....			2,351	1,969
Started in current year.....			912	770
Started prior to current year...			1,439	1,199

*Reactivated Cases Readmitted to Current Register

**Provisional

Extent of Verification of Polio and DPT*
Vaccinations in the Baltimore Health Survey**

The Baltimore Health Survey, inaugurated in 1960, is a continuing means of securing data on the health of the population of Baltimore through a random sample of families chosen each month. Each month, 100 different dwelling places are selected and visited, for a total of 1,200 dwelling places per year. A basic questionnaire contains questions on the status of polio and DPT vaccinations of each individual, his illness record for the two previous weeks, and his use of Health Department clinics and private physicians. From time to time special questionnaire forms are added. During the second quarter of 1962 (April, May and June) a special form was used for each child under seven years of age to determine the extent of verification of the polio and DPT vaccinations reported on the basic questionnaire. The purpose of this special questionnaire was to determine how much reliance can be placed on the information obtained by the regular Baltimore Health Survey. This is judged on the basis of the parent's ability to produce a record to prove her answers.

On the basic questionnaire the respondent is asked (for each member of the household):

1. Has he (or she) had a polio shot? How many?
2. If under seven, has he (or she) had shots for diphtheria, whooping cough, and tetanus?

* Diphtheria, pertussis and tetanus

** Prepared by Mrs. Anne C. Rodman, M.S., Public Health Statistician, Bureau of Biostatistics, Research and Planning Section, Baltimore City Health Department.

On the special questionnaire for children under seven the interviewer answered the following questions:

1. Were the number of polio shots verified?

() No () Yes

2. Source of verification

a. Clinic Record

b. Physician's Record

c. Child's Baby Book

d. Other

3. Were the DPT shots verified?

() No () Yes

4. Source of verification

a. Clinic Record

b. Physician's Record

c. Child's Baby Book

d. Other

A total of 121 children with polio and DPT shots and an additional 2 with DPT shots only were included in the study.

The age distribution of the vaccinated children and the extent of verification of the polio shots by age of child and race are shown in Table 1. Of the 121 children vaccinated the highest number (25) were in the five-year-old group. This may reflect only the distribution of the children by age, but it seems likely that the intensive campaign to use the Salk vaccine in 1956 and 1957 is reflected in the five and six-year old groups and that the dip in the next lower age group shows a slump in the use of the vaccine.

The number and per cent of polio shots verified for each age and race group is also shown in Table 1. This is high for the infants (71.4%) as might be expected, and highest for the six-year-olds (75.0%). The latter fact is probably due to the necessity on the parent's part to have verifications of DPT and smallpox vaccinations at the time of the school entrance health examination, and the polio records are kept with these.

This study shows verification of polio and DPT vaccinations to be closely related. It is interesting that the nonwhites showed a higher overall per cent of verification (69.1%) than the whites (54.5%). For all children combined 61.2% had polio shots for which verification was available.

One might suspect that the size of the family could affect the extent of verification. i.e., that the mother with several children might keep less reliable records than the mother with only one child. Table 2 shows the extent of verification of polio shots according to number of children under 10 years in the family. Here, grandchildren, foster children, and relatives were excluded, leaving a total of 94 children and step-children. The highest per cent of verification for both races combined was in three-child families (81.8%). Verification was in general lower for four-child families, but the figures here are quite small. Apparently the mother with several children keeps better records than the mother with only one child. One possible explanation for this is that the mother is more aware of the need of having records available.

The 121 children vaccinated for polio were classified by education of household head and the results are shown in Table 3. Of those vaccinated, the largest per cent had parents with a high school education. The same was true of those vaccinated and verified. However, the per cent verified, is highest for those with 7 to 9 years of schooling. In the whites the per cent

of verification increases with increasing education, while the nonwhites with less than 10 years of schooling show a better verification rate than the better-educated group. This may have some relation to the fact that the least well-educated nonwhites would be the most frequent clinic users and are careful of the records given them at the clinics.

The source of record verification, shown in Table 4, bears out the theory that the nonwhites in this sample were heavier clinic users than the whites. Among the whites over 90% had clinic or physician verification, and these were about equally divided. In the nonwhites 63 per cent were verified by a clinic record and only 8 per cent by a physician. Among the nonwhite families interviewed 29 per cent of the verifications were from baby books.

Similar information was obtained for DPT shots and is shown in the accompanying tables. Here we find the same results as with the polio shots: (1) the per cent verified was highest for the six-year-olds and lowest for the four-year-olds; (2) the highest per cent verification was found in families with three children under 10; (3) the per cent verification increased with education in the whites, but was highest in the nonwhites with less than 10 years' schooling; and (4) the nonwhites showed a higher verification rate (69.1%) than the whites (55.9%). For all children combined, 61.8 per cent had DPT shots for which verification was available.

Table 5 summarizes the information for both polio and DPT vaccinations. Almost all children had received both types of shots: 62 per cent had both types verified; and 38 per cent had neither type verified. The per cent verified was higher in the nonwhites (with 70 per cent verified) than in the whites (with 55 per cent verified).

SUMMARY

1. Parents of 121 children under seven with polio and DPT shots and an additional 2 with DPT shots only were asked for verification records.
2. Among children reported to have had both vaccines, 62 per cent were verified by records. The figure was higher for nonwhites (70%) than for whites (55%).
3. By age, the highest per cent of verification was found in the six-year-olds and the lowest in the four-year-olds. The time since vaccination seems to have little to do with the extent of verification.
4. By size of family, the highest per cent of verification was found in families with three children under 10 years of age.
5. By education of household head, the per cent of verification increased with better education in the whites, but was highest for those with 7-9 year's schooling in the nonwhites.
6. By source of verification, almost all of the records for white families were either from clinic or physician, and these were evenly divided. In the nonwhites most verifications were clinic records or baby books.

Table 1
POLIO AND DPT VACCINATIONS
EXTENT OF VERIFICATION BY AGE OF CHILD AND RACE

POLIO SHOTS Age	TOTAL			WHITE			NONWHITE		
	No. Of Children With Shots	No. Of Children With Shots Verified	Per Cent Verified	No. Of Children With Shots	No. Of Children With Shots Verified	Per Cent Verified	No. Of Children With Shots	No. Of Children With Shots Verified	Per Cent Verified
Total	121	74	61.2	66	36	54.5	55	38	69.1
0	14	10	71.4	10	7	70.0	4	3	75.0
1	20	11	55.0	12	6	50.0	8	5	62.5
2	14	10	71.4	8	6	75.0	6	4	66.7
3	18	12	66.7	8	4	50.0	10	8	80.0
4	14	5	35.7	7	1	14.3	7	4	57.1
5	25	14	56.0	15	8	53.3	10	6	60.0
6	16	12	75.0	6	4	66.7	10	8	80.0
DPT SHOTS Total	123	76	61.3	68	38	55.9	55	38	69.1
0	15	10	66.7	11	7	63.6	4	3	75.0
1	21	12	57.1	13	7	53.8	8	5	62.5
2	14	10	71.4	8	6	75.0	6	4	66.7
3	18	12	66.7	8	4	50.0	10	8	80.0
4	14	5	35.7	7	1	14.3	7	4	57.1
5	26	15	57.7	15	9	60.0	11	6	54.5
6	15	12	80.0	6	4	66.7	9	8	88.9

Table 2
POLIO AND DPT VACCINATIONS
EXTENT OF VERIFICATION ACCORDING TO NUMBER
OF CHILDREN IN FAMILY

POLIO SHOTS No. in Family Under 10 Years	TOTAL			WHITE			NONWHITE		
	No. Of Children With Shots	No. Of Children With Shots Verified	Per Cent Verified	No. Of Children With Shots	No. Of Children With Shots Verified	Per Cent Verified	No. Of Children With Shots	No. Of Children With Shots Verified	Per Cent Verified
Total	94	61	64.9	58	32	55.1	36	29	80.6
1	18	11	61.1	13	8	61.5	5	3	60.0
2	36	23	63.9	18	8	44.4	18	15	83.3
3	22	18	81.8	11	9	81.8	11	9	81.8
4	13	9	69.2	11	7	63.6	2	2	100.0
5	-	-	-	-	-	-	-	-	-
6 or more	5	0	0	5	0	0	-	-	-
DPT SHOTS									
Total	95	63	66.3	60	34	56.7	35	29	82.9
1	18	12	66.7	13	9	69.2	5	3	60.0
2	36	23	63.9	18	8	44.4	18	15	83.3
3	21	18	85.7	11	9	81.8	10	9	90.0
4	15	10	66.7	13	8	61.5	2	2	100.0
5	-	-	-	-	-	-	-	-	-
6 or more	5	0	0	5	0	0	-	-	-

Table 3

POLIO AND DPT VACCINATIONS
EXTENT OF VERIFICATION ACCORDING TO EDUCATION
OF HOUSEHOLD HEAD

POLIO SHOTS Education of Household Head	TOTAL			WHITE			NONWHITE		
	No. Of Children With Shots	No. Of Children With Shots Verified	Per Cent Verified	No. Of Children With Shots	No. Of Children With Shots Verified	Per Cent Verified	No. Of Children With Shots	No. Of Children With Shots Verified	Per Cent Verified
Total	121	74	61.2	66	36	54.5	55	38	69.1
1-6 Years	8	4	50.0	5	2	40.0	3	2	66.7
7-9 Years	44	28	63.6	23	10	43.5	21	18	85.7
High School	57	34	59.6	28	17	60.7	29	17	58.6
More than H.S.	9	5	55.6	8	5	62.5	1	-	0
Don't Know	3	3	100.0	2	2	100.0	1	1	100.0
DPT SHOTS									
Total	123	76	61.8	68	38	55.9	55	38	69.1
1-6 Years	8	4	50.0	5	2	40.0	3	2	66.7
7-9 Years	44	29	65.9	23	11	47.8	21	18	85.7
High School	58	34	58.6	29	17	58.6	29	17	58.6
More than H.S.	10	6	60.0	9	6	66.7	1	0	0
Don't Know	3	3	100.0	2	2	100.0	1	1	100.0

Table 4

Polio and DPT Vaccinations
Source of Record Verification

Source	POLIO SHOTS			
	White		Nonwhite	
	Number	Per Cent	Number	Per Cent
Total	36	100.0	38	100.0
Clinic	16	44.4	24	63.2
Physician	17	47.2	3	7.9
Baby Book	2	5.6	11	28.9
Other	1	2.8	0	0

DPT SHOTS				
Total	38	100.0	38	100.0
Clinic	16	42.1	24	63.2
Physician	18	47.4	3	7.9
Baby Book	3	7.9	11	28.9
Other	1	2.6	0	0

Table 5

Number of Children with Both Polio and DPT
Vaccinations for Which Both Records were Verified

Record Verified	Total		White		Nonwhite	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Total	120	100.0	66	100.0	54	100.0
Polio Only	0	0	0	0	0	0
DPT Only	1	.8	1	1.5	0	0
Polio and DPT	74	61.7	36	54.6	38	70.4
Neither	45	37.5	29	43.9	16	29.6



BALTIMORE CITY HEALTH DEPARTMENT
RESEARCH AND PLANNING SECTION

QUARTERLY

STATISTICAL

REPORT

BIRTHS

MARRIAGES

MORBIDITY

MORTALITY

FIRST & SECOND QUARTERS-1963

SEPTEMBER 30, 1963. Vol. 15, Nos. 1 & 2

BALTIMORE CITY HEALTH DEPARTMENT

ROBERT E. FARBER, M.D.

Commissioner

RESEARCH AND PLANNING SECTION

MATTHEW TAYBACK, Sc.D.

Assistant Commissioner of Health

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation."

Quetelet

Inquiries concerning the materials published, should be addressed to Mr. Todd M. Frazier, Director, Bureau of Biostatistics, Baltimore City Health Department, Baltimore 3, Maryland.

TABLE OF CONTENTS

	Page
A Summary of Vital Events	1 - 3
B Annual Rates by Month for Births and Selected Causes of Death	4
C Morbidity Rates by Month	5
D Average Morbidity Rates by Month	6
E Tables of Vital Events	
<u>FIRST QUARTER</u>	
I Marriages, Births, Deaths by Race	7
II Deaths From Selected Causes	8
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	9
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths, Tuberculosis Hospital Admissions and Patient's Receiving Chemotherapy	10
<u>SECOND QUARTER</u>	
I Marriages, Births, Deaths by Race	11
II Deaths From Selected Causes	12
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	13
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths and Tuberculosis Hospital Admissions	14
F Baltimore's Polio Inoculation Status, Baltimore Health Health Survey, January-June, 1963	15 - 25



Vital Events - Baltimore, Maryland

January-June, 1963

Births

There were 10,572 births among Baltimore residents during the period January-June, 1963 compared to 10,520 during the first six months of 1962. The resulting birth rate was 22.9 per 1,000 population. The white birth rate of 18.6 per 1,000 showed a slight increase over the rate of 17.9 during the comparable months of 1962. The nonwhite birth rate has shown a decrease each year since the 1957-1958 period when there were approximately 36 births per 1,000 population. During the first half of 1963 the nonwhite birth rate dropped to 30.1 per 1,000, a rate comparable to the levels seen during 1947-1948.

Mortality

There were 6,441 resident deaths during the first six months of 1963, giving a death rate of 13.9 per 100,000 population compared to 12.9 for the average of the same periods of 1960-1962. The increase in deaths occurred primarily in the first two months of 1963 when the city was experiencing an influenza outbreak. During this two month period deaths attributed to influenza and pneumonia increased 131 per cent over the number of deaths from the same causes during the comparable period of 1962. Deaths due to motor vehicle accidents reached a total of 85 for the period January-June, 1963 compared to 72 during the same period of 1962.

Infant and Maternal Mortality

The white infant mortality rate dropped to 21.7 per 1,000 live births for the months January-June, 1963, from a rate of 26.6 for the comparable months of 1962. Both the neonatal and post-neonatal components decreased. The nonwhite infant mortality rate was 40.3 per 1,000 live births, a slight decrease from the 1960-1962 average of 41.2, but an increase over the 37.2 deaths per 1,000 live born infants experienced during the first six months of 1962. Deaths occurring during the neonatal period accounted for the increase.

Four maternal deaths occurred during the first half of this year with the resulting rate being approximately four maternal deaths for every 10,000 live births.

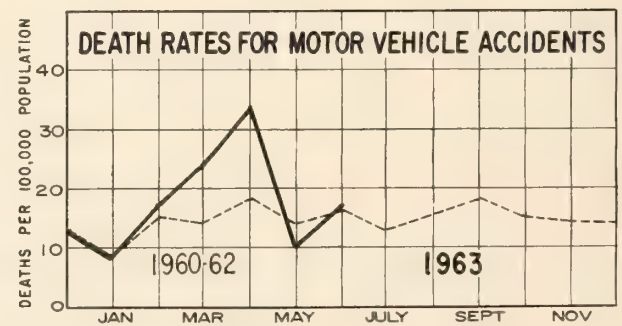
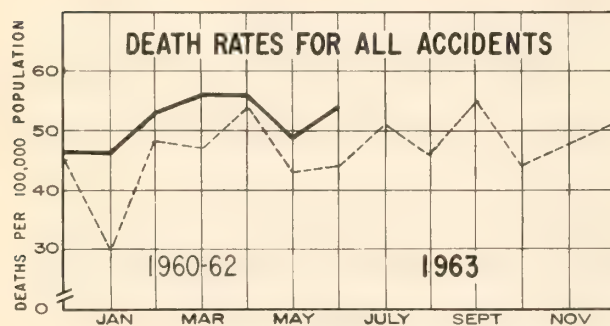
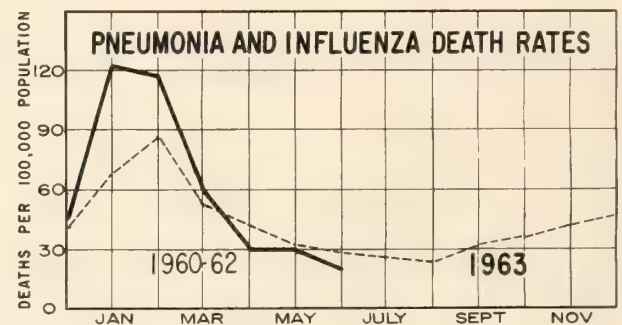
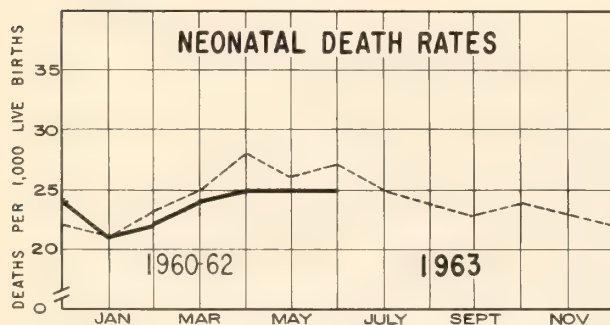
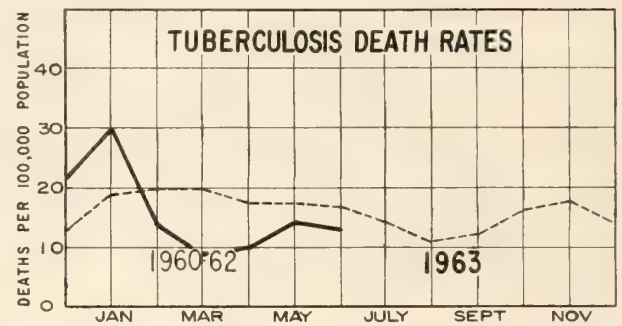
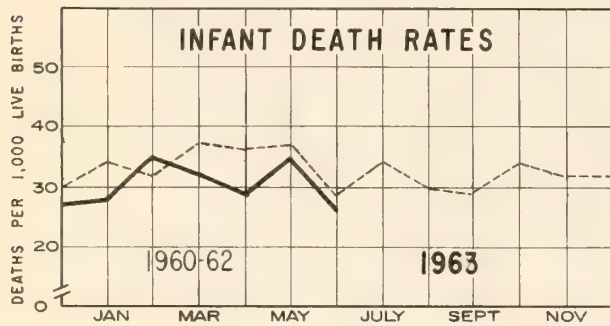
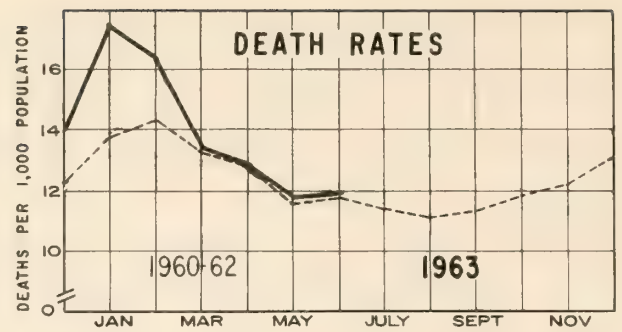
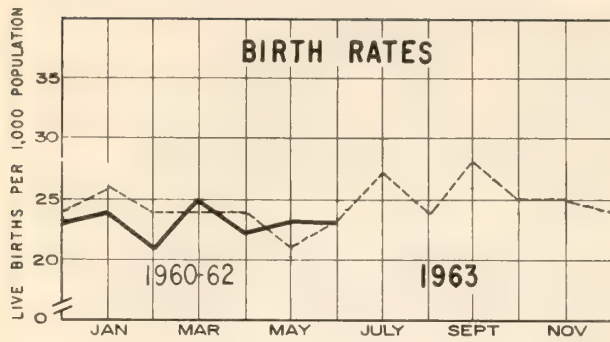
Morbidity

Information obtained from the Baltimore Health Survey indicated early in January that Baltimore was experiencing a sudden increase of acute illness. At the peak of the outbreak, attributed to Asian influenza, which occurred about February 1, approximately one out of every five persons interviewed reported a respiratory illness. By the middle of February the illness rate had begun to subside, but respiratory illness rates remained higher than the 1961-1962 average through the month of March.

There has not been a case of diphtheria reported in Baltimore since 1958 and typhoid fever cases have averaged only two a year for the last five years. This excellent achievement is the

result of the widespread immunization and health education programs conducted jointly by the medical profession and the Health Department. Consequently, these two diseases are being deleted from Table 3 and replaced by cases of lead paint poisoning and infectious hepatitis.

The number of newly reported cases of tuberculosis increased from 414 in the first six months of 1962 to 426 in 1963. There were 64 reactivated cases. Admissions to tuberculosis hospitals decreased by 11 per cent from 419 in 1962 to 372 in 1963, while 571 persons were started on chemotherapy, bringing the total number of patients on chemotherapy to 2,214 as of June 30, 1963, as contrasted with 2,197 as of June 30, 1962.



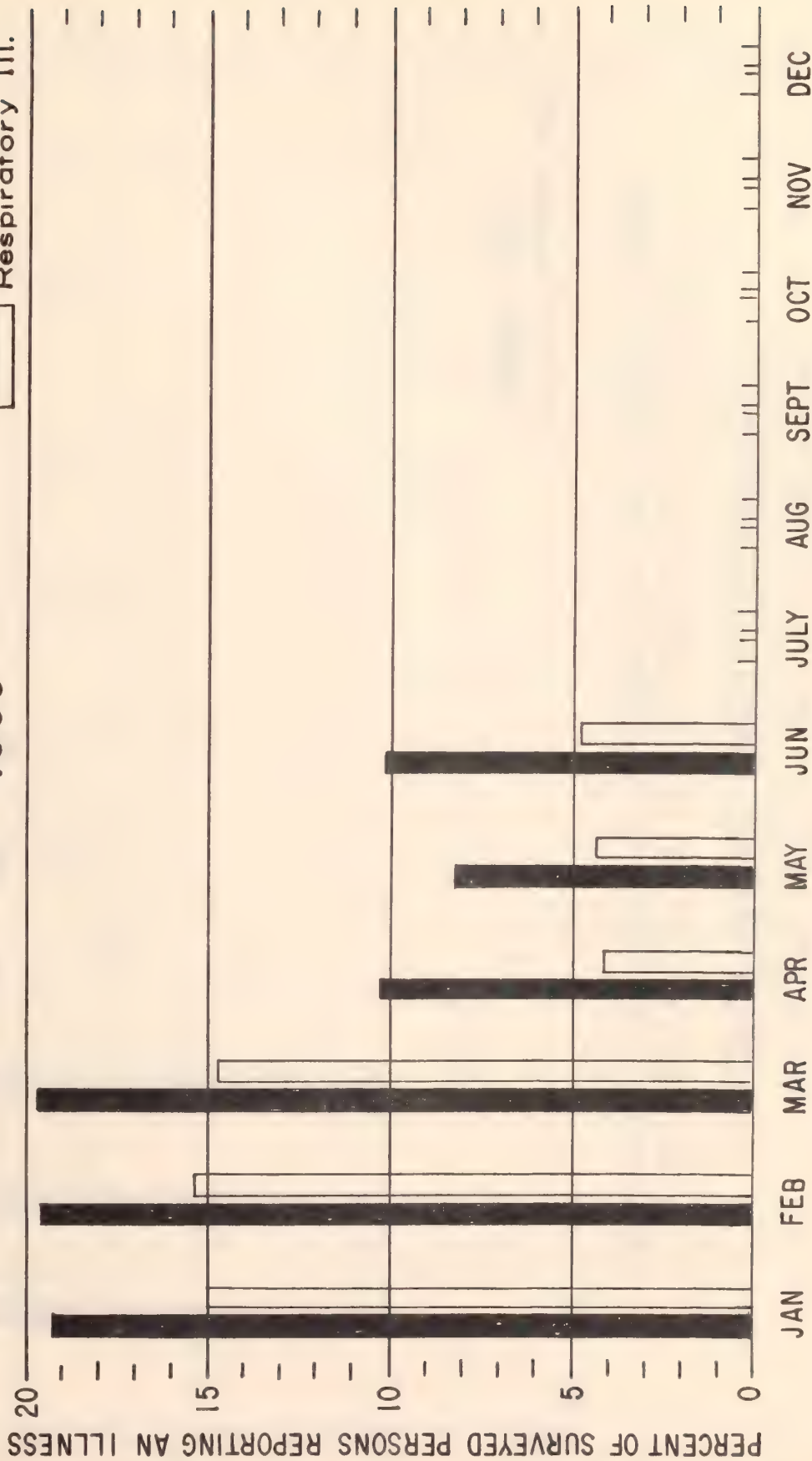
BALTIMORE CITY HEALTH DEPARTMENT

BALTIMORE HEALTH SURVEY

MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

1963

■ All illness
□ Respiratory Ill.



BALTIMORE CITY HEALTH DEPARTMENT

BALTIMORE HEALTH SURVEY

MORBIDITY DUE TO ACUTE RESPIRATORY ILLNESS
AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

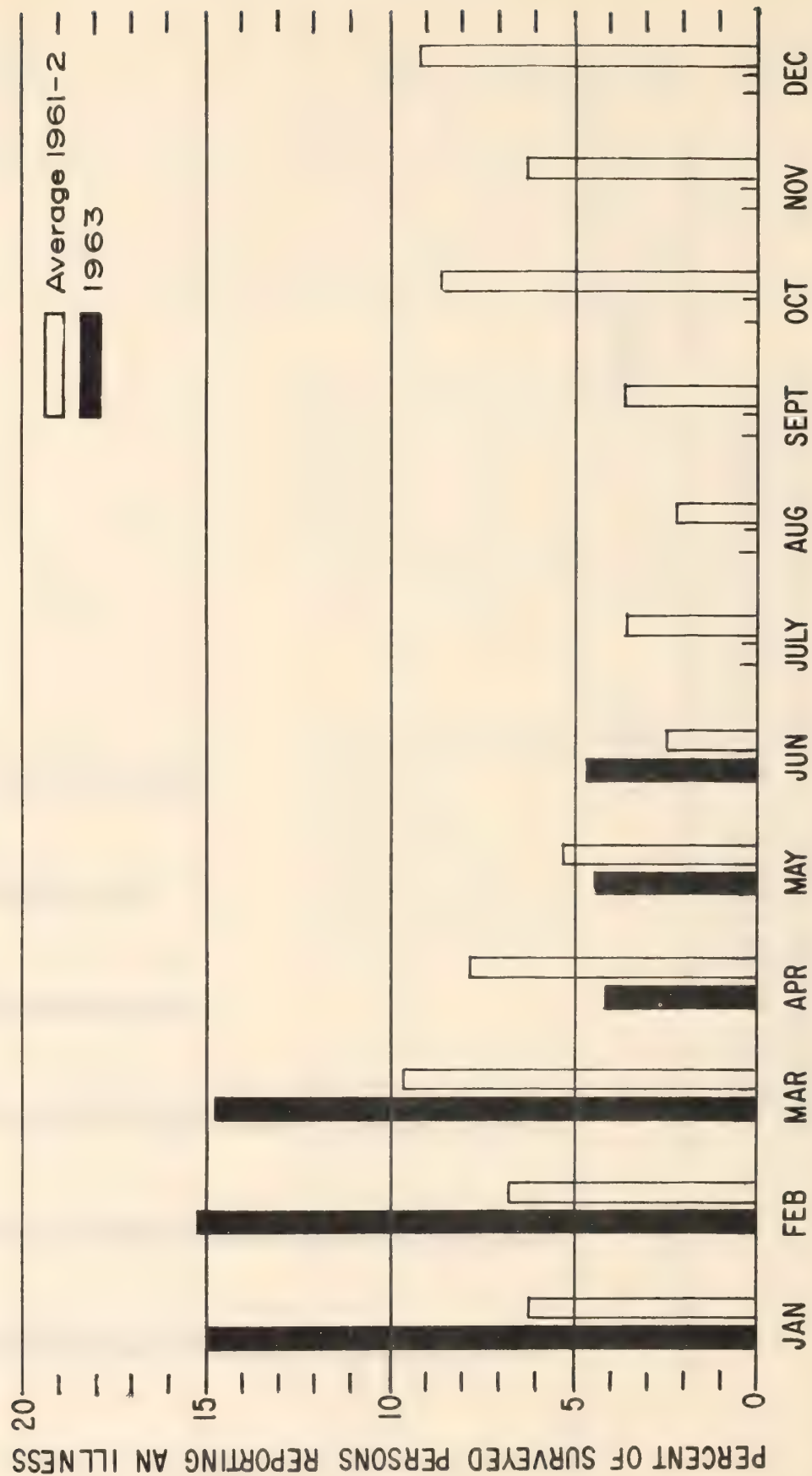


Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: First Quarter, 1963 and 1960-1962

Vital Event	JANUARY-MARCH			
	Number		Rate*	
	1963	Average 1960-1962	1963	Average 1960-1962
	All Races			
Marriages recorded.....	1,791	1,933	7.8	8.4
Births.....	5,340	5,669	23.3	24.6
Deaths, all causes.....	3,614	3,161	15.7	13.7
Deaths, under one year.....	169	193	31.6	34.0
under 28 days.....	122	131	22.8	23.1
28 days-11 months....	47	62	8.8	10.9
White				
Marriages recorded.....	1,095	1,164	7.6	7.9
Births.....	2,649	2,890	18.4	19.6
Deaths, all causes.....	2,473	2,195	17.1	14.9
Deaths, under one year.....	59	79	22.3	27.3
under 28 days.....	44	54	16.6	18.7
28 days-11 months....	15	25	5.7	8.6
Nonwhite				
Marriages recorded.....	696	769	8.1	9.2
Births.....	2,691	2,779	31.5	33.3
Deaths, all causes.....	1,141	966	13.3	11.6
Deaths, under one year.....	110	114	40.9	41.0
under 28 days.....	78	77	29.0	27.7
28 days-11 months....	32	37	11.9	13.3

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1962--total population 932,000; white, 585,000; nonwhite, 347,000.

Table II

Resident Deaths From Selected Causes
First Quarter, 1963 and 1960-1962

Cause of Death	JANUARY-MARCH			
	Number		Rate Per 100,000*	
	1963	Average 1960-1962	1963	Average 1960-1962
All Causes.....	3,614	3,161	15.7	13.7
Tuberculosis (001-019).....	42	45	18.3	19.5
Syphilis (020-029).....	7	7	3.0	3.0
Cancer (140-205).....	496	470	215.8	203.6
Diabetes mellitus (260).....	97	72	42.2	31.2
Vascular lesions of the central nervous system (330-334).....	267	239	116.2	103.6
Diseases of the heart (410-443).....	1,612	1,379	701.5	597.5
Influenza and pneumonia (480-483, 490-493).....	226	159	98.3	68.9
Nephritis and nephrosis (590-594).....	22	21	9.6	9.1
Puerperal causes (640-652, 670-689)...	1	3	0.4	1.3
Congenital malformations (750-759).....	33	43	14.4	18.6
Certain diseases of early infancy (760-776).....	99	123	43.1	53.3
Suicides (963, 970-979).....	22	22	9.6	9.5
Homicides (964, 980-999).....	27	27	11.7	11.7
Accidents (800-802, 810-835, 840-962)...	118	95	51.3	41.2
Motor vehicles (810-835).....	38	29	16.5	12.6

*Rates shown for all causes are per 1,000 population.

TABLE III

CASES AND DEATHS FROM SELECTED CAUSES AND INFANT DEATHS BY HEALTH DISTRICTS
FIRST QUARTER 1963 and 1960-1962 AVERAGE

Cause of Illness and Death	*TOTAL CITY		EASTERN		WESTERN		DRUID		SOUTHEASTERN		SOUTHERN	
	1963	Average 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962
Infant deaths	169	184	40	58	52	42	37	45	20	21	15	17
Tuberculosis Cases all forms Deaths	221 41	191 42	65 7	57 11	48 11	42 11	60 9	43 10	31 5	30 6	17 4	19 4
Syphilis Cases Deaths	420 6	353 9	123 2	97 2.4	102 1	96 1	142 3	107 3	24 0	26 0.3	28 0	22 0.3
Infectious Cases hepatitis Deaths	20 1	58 2	10 0	19 1	2 1	7 0.5	3 0	7 0.5	4 0	21 0	1 0	4 0
Lead paint Cases poisoning Deaths	0 0	4 0	0 0	2 0	0 0	2 0	0 0	0 0	0 0	0 0	0 0	0 0
Whooping Cases cough Deaths	3 0	17 0.3	2 0	3 0	1 0	6 0	0 0	4 0	0 0	3 0.3	0 0	1 0
Meningococcal Cases infections Deaths	10 1	6 1	6 0	1 0.7	0 0	1 0.3	1 0	1 0	4 1	0 0	0 0	3 0
Measles Cases Deaths	141 0	836 0.3	89 0	267 0	14 0	190 0	11 0	222 0	24 0	115 0	3 0	52 0.3
Acute polio- myelitis Cases (paralytic) Deaths	0 0	0 0.3	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0.3

ALL FIGURES CORRECTED FOR RESIDENCE WITHIN MARYLAND

*TOTALS INCLUDE SOME INTRANSFERS ALLOCATED TO BALTIMORE CITY BUT NOT OTHERWISE ALLOCATED TO HEALTH DISTRICTS

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths, Tuberculosis Hospital Admissions
and Patients Receiving Chemotherapy
First Quarter, 1963 and 1962

	JANUARY-MARCH	
	Total	
	1963	1962
Newly Reported Cases.....	205	198
White.....	77	98
Nonwhite.....	128	100
Reported After Death.....	13	14
Number of Readmissions*.....	32	31
White.....	14	12
Nonwhite.....	18	19
Number of Tuberculosis Deaths.....	33	37
White.....	18	17
Nonwhite.....	15	20
Number of Patients Admitted to Tuberculosis Hospitals.....	186	204
Number of Patients on Chemotherapy, March 31	2,298	2,073
Stated in current year.....	291	221
Started prior to current year.....	2,007	1,852

*Reactivated cases readmitted to current register

Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Second Quarter, 1963 and 1960-1962

Vital Event	APRIL-JUNE				JANUARY-JUNE	
	Number		Rate*		Rate*	
	1963	Average 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962
	All Races					
Marriages recorded.....	2,545	2,516	11.0	10.8	9.4	9.6
Births.....	5,232	5,276	22.5	22.6	22.9	23.6
Deaths, all causes.....	2,827	2,812	12.2	12.1	13.9	12.9
Deaths, under one year.....	157	178	30.0	33.7	30.8	33.9
under 28 days.....	132	138	25.2	26.1	24.0	24.6
28 days-11 months.....	25	40	4.8	7.6	6.8	9.3
	White					
Marriages recorded.....	1,677	1,683	11.5	11.3	9.6	9.6
Births.....	2,736	2,739	18.8	18.4	18.6	19.0
Deaths, all causes.....	1,936	1,983	15.3	13.3	15.2	14.1
Deaths, under one year.....	58	73	21.2	26.7	21.7	27.0
under 28 days.....	50	58	18.3	21.2	17.4	19.9
28 days-11 months.....	8	15	2.9	5.5	4.3	7.1
	Nonwhite					
Marriages recorded.....	868	833	10.0	9.9	9.1	9.6
Births.....	2,496	2,537	28.9	30.1	30.1	31.7
Deaths, all causes.....	891	829	10.3	9.8	11.8	10.7
Deaths, under one year.....	99	105	39.7	41.4	40.3	41.2
under 28 days.....	82	80	32.9	31.5	30.8	29.5
28 days-11 months.....	17	25	6.8	9.9	9.5	11.7

Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1962--total population 932,000; white, 585,000; nonwhite, 347,000.

Table II

Resident Deaths From Selected Causes
Second Quarter, 1963 and 1960-1962

Cause of Death	APRIL-JUNE				JANUARY-JUNE	
	Number		Rate Per 100,000*		Rate Per 100,000*	
	1963	Average 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962
All Causes.....	2,827	2,812	12.2	12.1	13.9	12.9
Tuberculosis (001-019).....	30	41	12.9	17.6	15.6	18.5
Syphilis (020-029).....	16	10	6.9	4.3	5.0	3.9
Cancer (140-205).....	464	478	199.7	204.8	207.7	204.2
Diabetes mellitus (260).....	70	64	30.1	27.4	36.1	29.3
Vascular lesions of the central nervous system (330-334).....	211	193	90.8	82.7	103.4	93.1
Diseases of the heart (410-443).....	1,192	1,170	513.0	501.4	606.7	549.2
Influenza and pneumonia (480-483, 490-493).....	62	79	26.7	33.9	62.3	50.6
Nephritis and nephrosis (590-594).....	20	22	8.6	9.4	9.1	9.3
Puerperal causes (640-652, 670-689).....	3	1	1.3	0.4	0.9	0.9
Congenital malformations (750-759).....	17	33	7.3	14.1	10.8	16.4
Certain diseases of early infancy (760-776).....	118	126	50.8	54.0	47.0	53.4
Suicides (963, 970-979).....	22	23	9.5	9.9	9.5	9.7
Homicides (964, 980-999).....	34	22	14.6	9.4	13.2	10.6
Accidents (800-802, 810-835, 840-962).....	119	109	51.2	46.7	51.3	44.0
Motor vehicles (810-835).....	47	37	20.2	15.9	18.4	14.2

*Rates shown for all causes are per 1,000 population.

TABLE III

CASES AND DEATHS FROM SELECTED CAUSES, AND INFANT DEATHS BY HEALTH DISTRICTS
SECOND QUARTER 1963 and 1960-1962 AVERAGE

Cause of Illness and Death	*TOTAL CITY		EASTERN		WESTERN		DRUID		SOUTHEASTERN		SOUTHERN	
	1963	Average 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962
Infant deaths	157	182	46	59	46	42	34	46	20	21	10	14
Tuberculosis Cases Deaths	223 29	214 38	67 4	65 8	39 7	49 10	56 10	49 8	35 5	34 9	26 2	16 3
Syphilis Cases Deaths	401 16	398 11	132 3	104 3	88 3	109 2	127 6	126 4	28 4	26 1	20 0	24 1
Infectious hepatitis Cases Deaths	29 1	43 2.3	9 0	13 0.3	2 0	10 0.7	6 0	5 1	9 1	11 0.3	3 0	4 0
Lead paint poisoning Cases Deaths	6 0	15 0	2 0	5 0	2 0	5 0	2 0	3 0	0 0	1 0	0 0	1 0
Whooping cough Cases Deaths	3 0	14 0.3	2 0	4 0	0 0	5 0.3	1 0	2 0	0 0	3 0	0 0	0 0
Meningococcal infections Cases Deaths	4 2	3 0.6	0 0	0 0	0 0	0 0.3	1 0	1 0.3	2 1	1 0	1 1	1 0
Measles Cases Deaths	610 0	886 0	339 0	324 0	37 0	138 0	48 0	213 0	175 0	145 0	10 0	66 0
Acute polio- myelitis (paralytic) Cases Deaths	0 0	0 0.6	0 0	0 0.3	0 0	0 0	0 0	0 0	0 0	0 0.3	0 0	0 0

ALL FIGURES CORRECTED FOR RESIDENCE WITHIN MARYLAND

*TOTALS INCLUDE SOME INTRANSFERS ALLOCATED TO BALTIMORE CITY BUT NOT OTHERWISE ALLOCATED TO HEALTH DISTRICTS

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths and Tuberculosis Hospital Admissions
Second Quarter and Semi-Annual 1963 and 1962

	APRIL-JUNE		JANUARY-JUNE	
	Total		Total	
	1963	1962	1963	1962
Newly Reported Cases.....	221	216	426	414
White.....	87	87	164	185
Nonwhite.....	134	129	262	229
Reported After Death.....	9	11	22	25
Number of Readmissions*.....	32	39	64	70
White.....	17	15	31	27
Nonwhite.....	15	24	33	43
Number of Tuberculosis Deaths...	25	34	58	71
White.....	13	17	31	34
Nonwhite.....	12	17	27	37
Number of Patients Admitted to Tuberculosis Hospitals.....	186	215	372	419
Number of Patients on Chemotherapy				
June 30.....			2,214	2,197
Started in current year.....			571	469
Started prior to current year.....			1,643	1,728

* Reactivated cases readmitted to current register

Baltimore's Polio Inoculation Status
Baltimore Health Survey, January-June, 1963

During Baltimore's recent mass Sabin oral polio inoculation campaign carried out in October and November, 1962 and March, 1963, record keeping in the field was minimized to counts by broad age groups of the participating population. This was done for expediency and because it was felt that a complete description of both the general acceptance of the oral vaccine and the extent of acceptance according to prior Salk inoculation status could be furnished by the Baltimore Health Survey. The survey provides a continuous systematic sampling of 100 Baltimore families each month and has become an excellent administrative aid with respect to public health issues.

Recent History of Paralytic Poliomyelitis in Baltimore

The incidence of paralytic poliomyelitis has, on the average, been low in Baltimore during the recorded history of this disease. Table 1 shows the number of cases per year and the age distribution of the cases for the years 1950-1962. During this period a total of 598 cases of paralytic polio were reported, 41.1 per cent of which occurred among children aged 1-4 years, 25.9 per cent among children aged 5-9 and only 4.2 per cent among those under one year of age.

Following the licensing of the Salk vaccine for mass production in 1955, the Baltimore City Health Department established poliomyelitis inoculation as a standard procedure of the well baby

and prenatal clinics and set up special inoculation clinics in the poorer areas of the city. Pediatricians and general practitioners joined in a widespread effort to inoculate as many children under 15 years of age as possible. A special survey carried out by the Baltimore City Health Department in November, 1956 showed that among white children aged 1-14 years, 71.0 per cent had received at least one shot of the Salk vaccine, while only 39.2 per cent of the nonwhite children in this age range had received any inoculations. During this same year there was a notable change in the distribution of paralytic cases between the races. Prior to 1956, the proportion of cases occurring among the nonwhite population had ranged between 10 and 15 per cent with an increase to 24 per cent in 1955. In 1956 this proportion jumped to 77 per cent of the total poliomyelitis experience and has remained around 50 per cent since that time.

A sudden outbreak reaching epidemic proportions occurred in 1960 when 97 cases of Type 3 paralytic poliomyelitis were reported. The outbreak was limited primarily to the older and lower socioeconomic areas of the city. There were 25 cases among those who had received three or more doses of Salk vaccine. However, it was determined that the vaccine had been 83 per cent effective, and this corresponds closely to the protection that it was originally reported to give. Information gathered through the Baltimore Health Survey during 1960, its first year of existence, showed that approximately 69 per cent of the children under 10 had received three or more doses of Salk vaccine. This figure increased to 74 per cent in 1961 and 77 per cent in 1962.

Baltimore Health Survey, January-June, 1963

Beginning in January, 1963, persons appearing in the Baltimore Health Survey sample were questioned as to both their Salk and Sabin vaccine inoculation status. If they had received one or both types of vaccine, they were then asked how many shots and/or doses they had received. Besides giving a picture of the general acceptance level of the two types of vaccines, this provided a measure of the extent to which the city's population is protected against polio by either Salk or Sabin or both vaccines.

During the six months period January through June, information was obtained regarding 1,792 persons, 730 of whom were under the age of 20 years. The response rate was 96 per cent for Sabin vaccine and 93 per cent for Salk vaccine. The lower response figure for Salk vaccine could be due to loss of memory or confusion since Salk vaccine has been given in a combination dose along with diphtheria, pertussis and tetanus vaccine.

Inoculation Rates by Type of Vaccine

A study of the inoculation rates based on the 1,792 persons interviewed during the period January-June, 1963 shows that 53.3 per cent received at least two doses of the Sabin oral vaccine while 44.8 per cent had received three or more shots of the Salk vaccine. Each age group, with the exception of the 1-4 age group, showed a higher inoculation rate for Sabin oral vaccine. Among those 1-4 years of age, 81.3 per cent had received at least three shots of Salk vaccine while 69.7 per cent took at least two doses of Sabin vaccine. Table 2 shows the inoculation rates by age group for Salk vaccine and Table 3 gives the comparable figures for Sabin vaccine.

Inspection of Table 3 shows that among pre-school age children the Sabin inoculation rate was 69.7 per cent; for children in the age group 5-9, 93.0 per cent; and for children aged 10-19, 89.0 per cent. These rates are in close agreement with those obtained from tallies made at the schools and feeding stations during rounds 1 and 2 of the oral polio campaign.

Since Type III Sabin vaccine was not available until the end of March, midway through the sampling period, and then was recommended only for those persons under 30 years of age, persons who had received two or more doses of Sabin vaccine at the time of interview were considered adequately protected in this study. A comparison of the inoculation rates for two and three doses of the oral vaccine obtained from those interviews made following round 3 shows that among the pre-school age children, 1-4 years, 74.5 per cent of those who had received Type I and II also received Type III; among those aged 5-9, 88.6 per cent and among those 10-19 years of age, 92.5 per cent.

Extent of Protection by Either or Both Vaccines

The 1,754 persons over one year of age interviewed were assigned to one of four categories depending upon their polio inoculation status, i.e.,

1. Only Salk vaccine adequate (three or more shots)
2. Only Sabin vaccine adequate (two or more doses at the time of interview)

3. Both Salk and Sabin adequate

4. Neither Salk nor Sabin adequate

Those under one year of age were omitted since some were under the recommended age to receive Sabin vaccine during rounds 1 and 2 of the campaign. Each of the above categories is informative. A high rate for "only Salk vaccine adequate" implies that many persons who had been protected by the Salk vaccine did not participate in the oral polio campaign. A high response rate for Sabin only is a measure of the number who for one reason or another failed to get polio shots but were motivated to get the "sugar drop". Those with both types of protection represent the extent to which the two campaigns were successful. Those with neither Salk nor Sabin in adequate amounts represent the extent to which the medical forces failed to motivate the population to protect themselves. Table 4 shows these rates for several age groups.

Among those persons who previously had three or more Salk shots, 82 per cent took advantage of the additional protection offered by the Sabin vaccine. Another 17 per cent who had neglected to obtain the Salk shots are now protected by Sabin vaccine. Although 38.2 per cent have not received adequate doses of either vaccine, the majority of these are adults. However, among children 1-4 years of age, 11.6 per cent have not received adequate Salk or Sabin vaccine. In this age group, which in the past has been subject to the highest poliomyelitis attack rates, nearly one out of every eight children is not adequately protected. For those persons in the age group 5-19, only 4 per cent are not adequately protected.

Geographic Distribution

Tables 5 and 6 give some indication of the geographic distribution of those persons under 20 years of age who are not adequately protected. There is a noteworthy difference in the proportion who are still unprotected among those in this age group living in the inner city compared to those in Wards 26, 27 and 28, the periphery of the city. Prior to the release of oral polio vaccine, only 7.6 per cent of those living in the outer city had failed to obtain three or more doses of Salk vaccine. Following the oral polio campaign, the proportion inadequately vaccinated was reduced to less than 1 per cent. The excellent response by this group to the two polio campaigns illustrates their awareness and acceptance of adequate preventive measures. By contrast, one person out of every five under 20 years of age living in the inner city had not received the recommended Salk vaccine inoculations in spite of an active inoculation program in the Health Department clinics. This number was reduced to one person out of every 12 after completion of rounds 1 and 2 of the oral polio campaign. Thus, the inadequately protected group among those under 20 years of age in this area was reduced by more than one-half, but the remaining 7.5 per cent, a slight under-estimation since those with two doses of Sabin were considered adequately protected, point out the need for continued effort to reach these young people who are still vulnerable to an attack of poliomyelitis.

Summary

Information gathered through the Baltimore Health Survey during the period January-June, 1963 shows that:

1. Excluding infants under one year of age, 62 per cent of the population sampled had received at least two doses of Sabin oral polio vaccine and/or three shots of Salk vaccine.
2. Among those in the 5-19 age group, 96 per cent could be considered adequately protected against poliomyelitis by one or both types of vaccine.
3. Among those in the 1-4 age group, 88 per cent were adequately protected at the time of interview.
4. Comparison of the inoculation rates for those under 20 years of age living in the inner city with those in the periphery, Wards 26, 27 and 28, shows a marked difference. Among those living in the inner city 7.5 per cent had not received adequate inoculations of either Salk or Sabin vaccine, while in the periphery less than one per cent were inadequately protected.

Table 1

Reported Cases of Paralytic Poliomyelitis by Age Group
Baltimore, 1950-1962

Year	Total	Age Group (Years)				
		Under 1	1-4	5-9	10-19	20 and over
1962	0	-	-	-	-	-
1961	2	-	1	1	-	-
1960	97	7	45	21	9	15
1959	15	1	10	4	-	-
1958	11	-	2	4	1	4
1957	7	1	3	3	-	-
1956	26	-	13	7	1	5
1955	33	1	16	7	2	7
1954	36	2	12	6	9	7
1953	92	2	39	19	16	16
1952	39	2	21	8	1	7
1951	15	-	5	3	1	6
1950	225	9	79	72	39	26

Table 2

Salk Inoculation Status by Age Group
Baltimore Health Survey
January-June, 1963

Age Group	No. in Sample	P E R C E N T		
		Not Inoculated	Three or More Shots	Four or More Shots
Total	1,792	41.3	44.8	22.5
Under 1	38	39.5	23.7	-
1-4	155	6.5	81.3	43.9
5-9	202	5.9	81.7	46.1
10-19	335	3.9	85.4	49.0
20-44	554	45.5	34.1	13.4
45 and over	508	86.2	4.9	0.8

Table 3

Sabin Inoculation Status by Age Group
Baltimore Health Survey
January-June, 1963

Age Group	No. in Sample	P E R C E N T	
		Not Inoculated	Two or More Doses
Total	1,792	36.9	53.3
Under 1	38	55.3	28.9
1-4	155	18.7	69.7
5-9	202	3.5	93.0
10-19	335	6.3	89.0
20-44	554	39.9	43.7
45 and over	508	71.3	21.4

Table 4

Salk and Sabin Inoculation Status by Age Group
 Baltimore Health Survey
 January-June, 1963

Age Group	Number in Sample	P E R C E N T			
		Salk Adequate Only	Sabin Adequate Only	Both Adequate	Neither Adequate
Total over 1 year	1,754	8.0	16.8	37.0	38.2
1-4	155	18.7	7.1	62.6	11.6
5-9	202	3.5	14.8	78.2	3.5
10-19	335	6.3	9.9	79.1	4.7
20-44	554	13.5	23.1	20.6	42.8
45 and over	508	1.6	18.1	3.3	77.0

Table 5

Inoculation Rates, Inner City and Periphery
Ages 1-19 Only

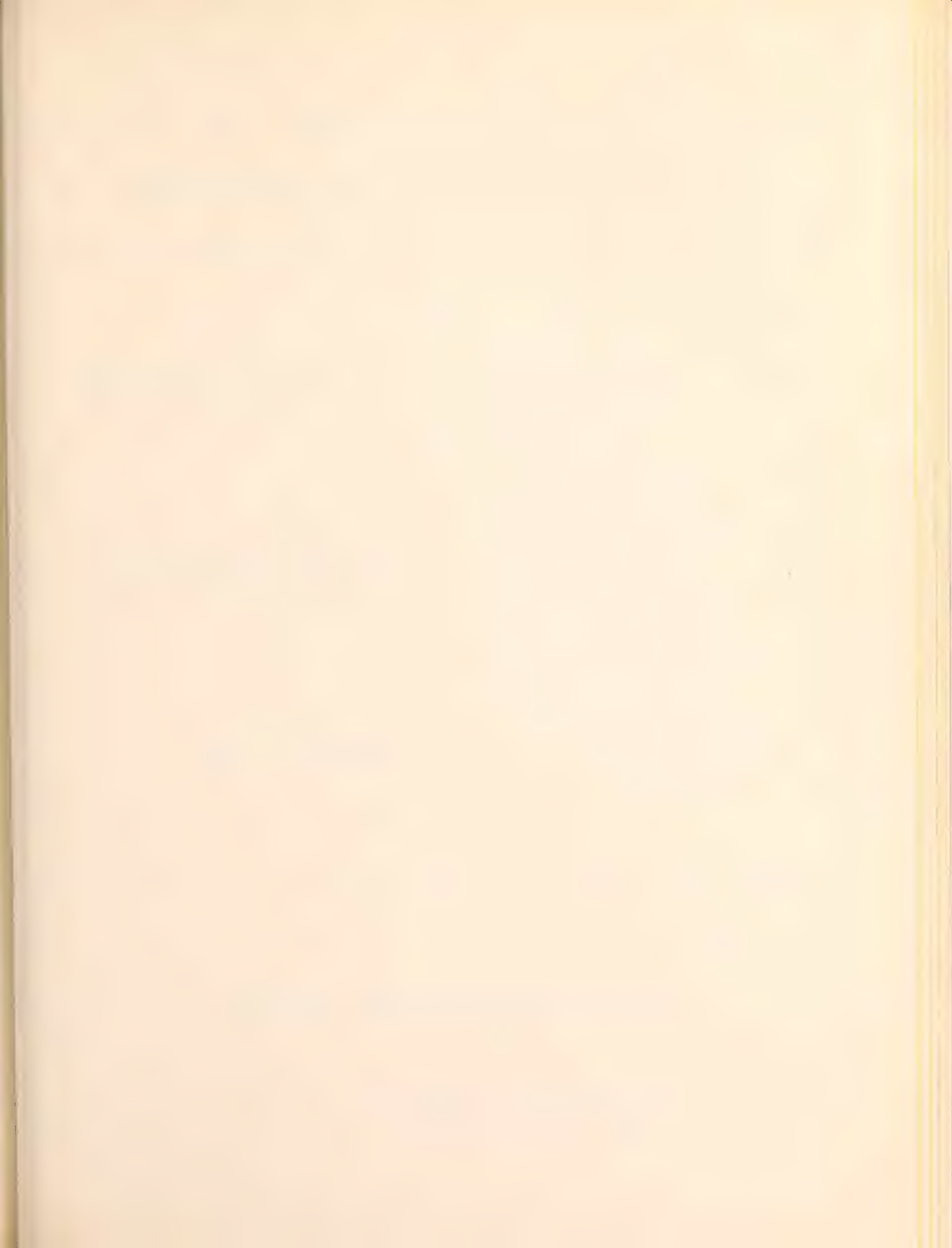
Area	No. in Sample	P E R C E N T			
		Salk Adequate Only	Sabin Adequate Only	Both Adequate	Neither Adequate
Total City	692	8.2	10.7	75.2	5.9
Inner City	534	7.9	11.8	72.8	7.5
Wards 26, 27 & 28	158	9.5	7.0	82.9	0.6

Table 6

Inoculation Rates by Health District
Ages 1-19 Only

Health District	No. in Sample	P E R C E N T			
		Salk Adequate Only	Sabin Adequate Only	Both Adequate	Neither Adequate
Eastern	154	11.0	11.7	70.1	7.2
Western	171	6.4	11.7	73.1	8.8
Druid	206	7.3	9.2	76.7	6.8
Southeastern	97	7.2	8.2	83.5	1.1
Southern	64	10.9	14.1	75.0	-





BALTIMORE CITY HEALTH DEPARTMENT
BUREAU OF BIOSTATISTICS

QUARTERLY
STATISTICAL
REPORT

BIRTHS

MARRIAGES

MORBIDITY

MORTALITY

THIRD QUARTER - 1963

FEBRUARY 7, 1964, Vol. 15, No. 3

BALTIMORE CITY HEALTH DEPARTMENT

Robert E. Farber, M D.
Commissioner

BUREAU OF BIOSTATISTICS

Elizabeth B. Kelley, B S
Director

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation".

Quetelet

The Baltimore Quarterly Statistical Report is prepared by the Bureau of Biostatistics for the purpose of distributing to interested agencies and individuals, a quantitative and cumulative record of health conditions during the current year.

Table of Contents

	Page
A Summary of Vital Events	1 - 2
B Annual Rates by Month for Births and Selected Causes of Death	3
C Morbidity Rates by Month	4
D Average Morbidity Rates by Month	5
E Tables of Vital Events	6 - 9
I Marriages, Births, Deaths by Race	6
II Deaths From Selected Causes	7
III Cases and Deaths From Selected Causes and Infant Deaths by Health District	8
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths, Tuberculosis Hospital Admissions and Patients Receiving Chemotherapy	9
F Births, Deaths and Cases by Health Districts, 1963	10 - 24
Eastern Health District	10 - 12
Western Health District	13 - 15
Druid Health District	16 - 18
Southeastern Health District	19 - 21
Southern Health District	22 - 24
G Population Estimate, Baltimore, Maryland - July 1, 1963	25 - 29



VITAL EVENTS-BALTIMORE, MARYLAND
July-September, 1963

BIRTHS

There were 6,000 resident births, 3,024 white and 2,976 non-white, reported during the third quarter of 1963. This gives a total of 16,572 births for the period January-September, 1963, a decrease of 28 births from the 16,600 reported during the comparable period of 1962. As a result of population changes, the number of births per 1,000 population for this nine month period increased from 23.8 in 1962 to 24.0 in 1963. The white birth increased from 19.2 to 19.7 while the nonwhite birth rate decreased from 31.6 to 30.8.

MORTALITY

There were 2,769 resident deaths during the third quarter of 1963 bringing the total for the first nine months of the year to 9,210. The resulting death rate for the period January-September was 13.3 per 1,000 population compared to 12.3 for the same months of 1962. During the three months July-September, 1963, the death rate from diseases of the heart, the leading cause of death, was 9.9 per cent higher than the average for the comparable months of 1960-1962. Accidents caused a total of 141 deaths, 46 of which resulted from motor vehicle accidents.

Infant mortality decreased during the first nine months of 1963 to 29.6 per 1,000 live births from the 1960-1962 average of 32.9. Both the neonatal and the post-neonatal components of the infant death rate decreased among both white and nonwhite births. The white infant

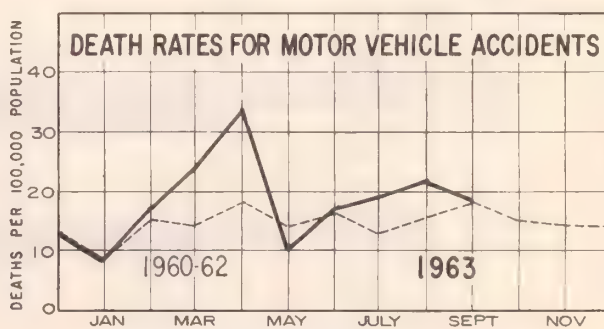
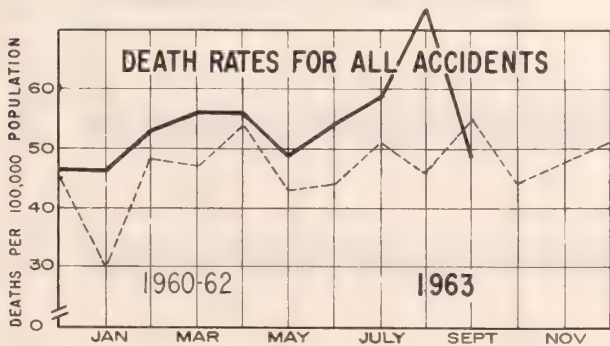
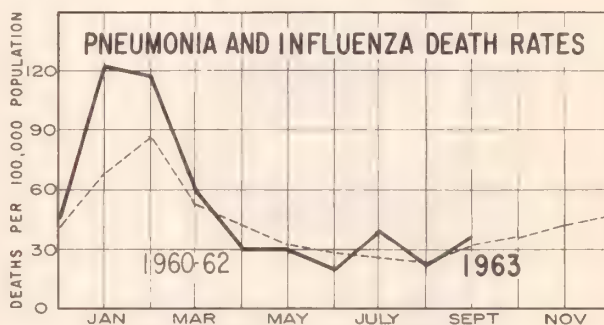
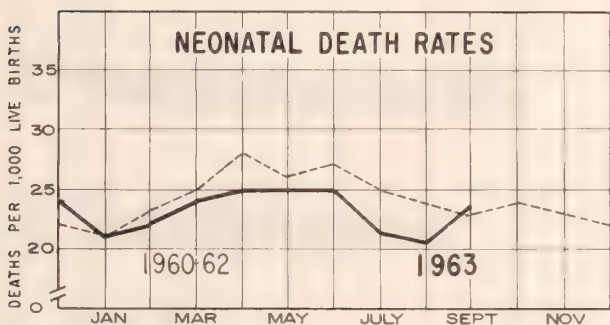
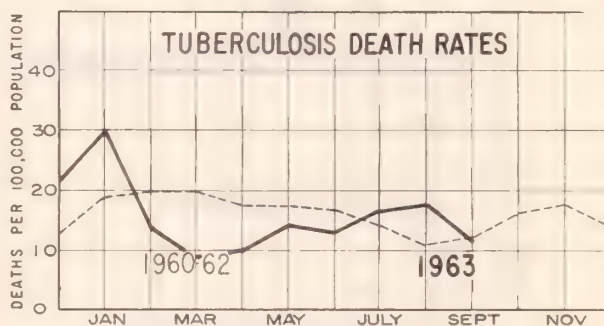
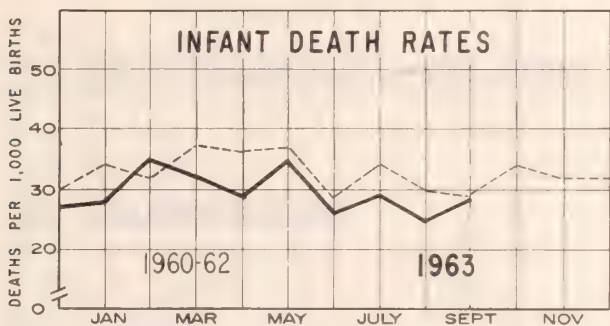
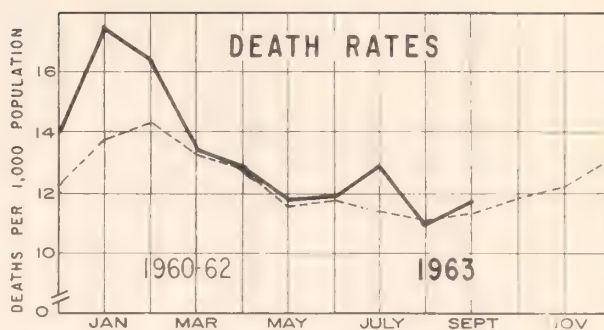
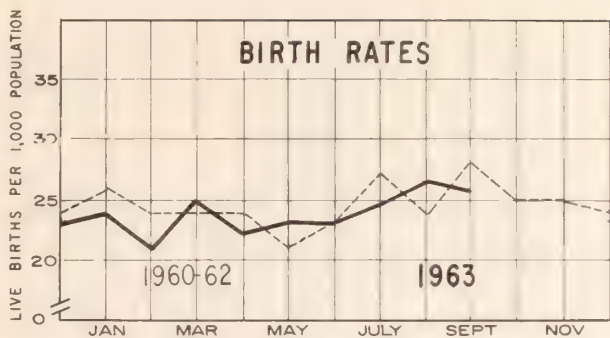
mortality rate for the January-September period was 22.2 compared to an average of 25.8 for 1960-1962 and the nonwhite rate was 37.1 compared to 40.4.

Three maternal deaths occurred during the third quarter of 1963 making a total of seven for the year to date.

MORBIDITY

Results of the Baltimore Health Survey show that during the first three months of the year the city experienced the highest total and respiratory illness rates seen since the beginning of the survey in 1960. Following this period, the rates dropped sharply to levels consistent with those of previous years and continued to follow normal seasonal patterns for the remainder of the nine month period.

Newly reported cases of tuberculosis numbered 191 during the third quarter, giving a total of 617 cases for the first nine months of the year. This represents a 3.5 per cent increase over 1962. Of the 617 cases, 585 were active. Readmissions increased from 86 in 1962 to 96 in 1963. As of September 30, 1963, there were 2,435 patients on chemotherapy, 882 of whom were started in the current year. The comparable figures for 1962 were 2,359 on chemotherapy with 732 started during that year. Admissions to tuberculosis hospitals declined by 17.6 per cent to 523.



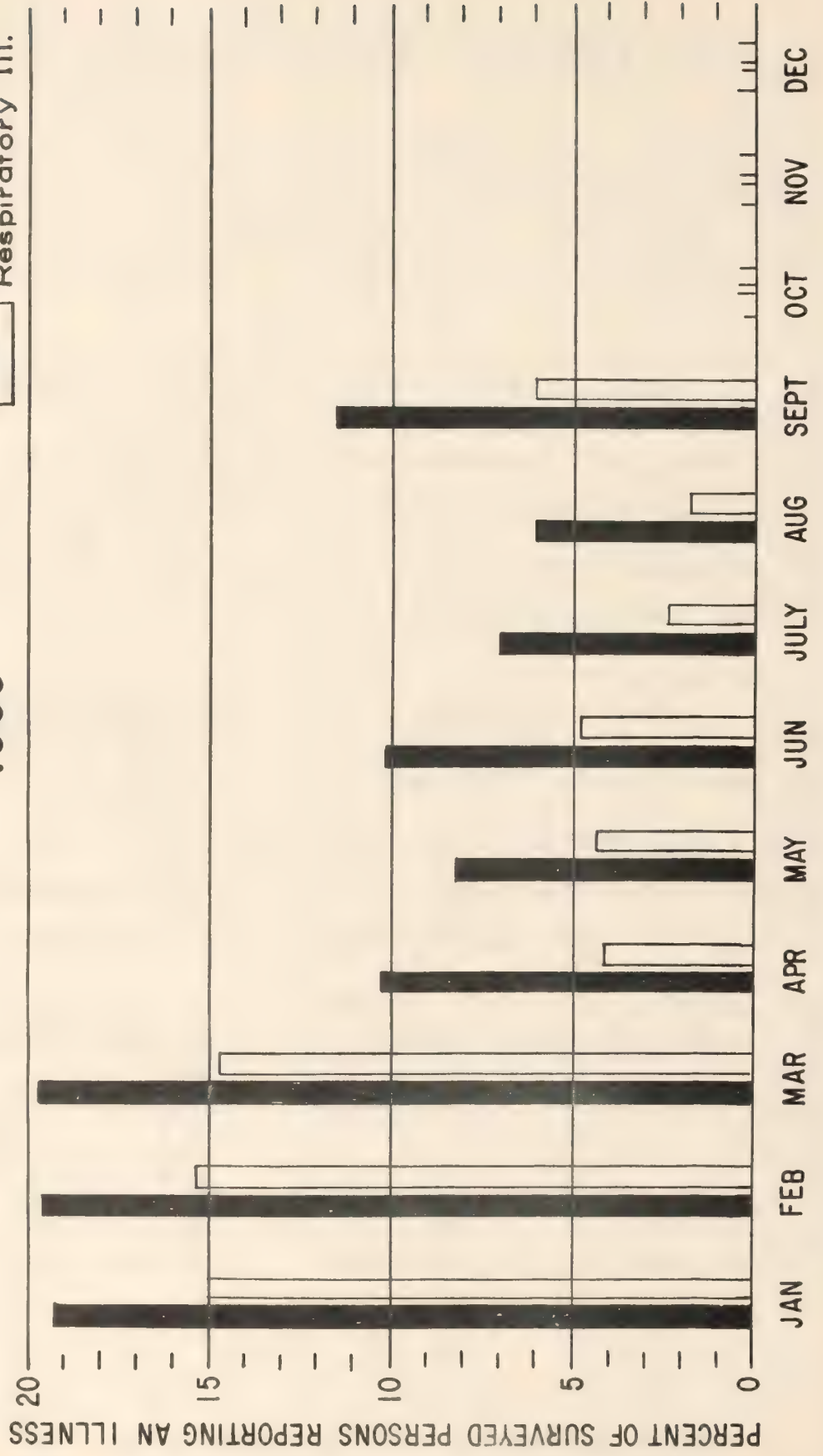
BALTIMORE CITY HEALTH DEPARTMENT

BALTIMORE HEALTH SURVEY

MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275 - 325 PERSONS) BY MONTH

1963

■ All illness
□ Respiratory Ill.



BALTIMORE CITY HEALTH DEPARTMENT
BALTIMORE HEALTH SURVEY

MORBIDITY DUE TO ACUTE RESPIRATORY ILLNESS
AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

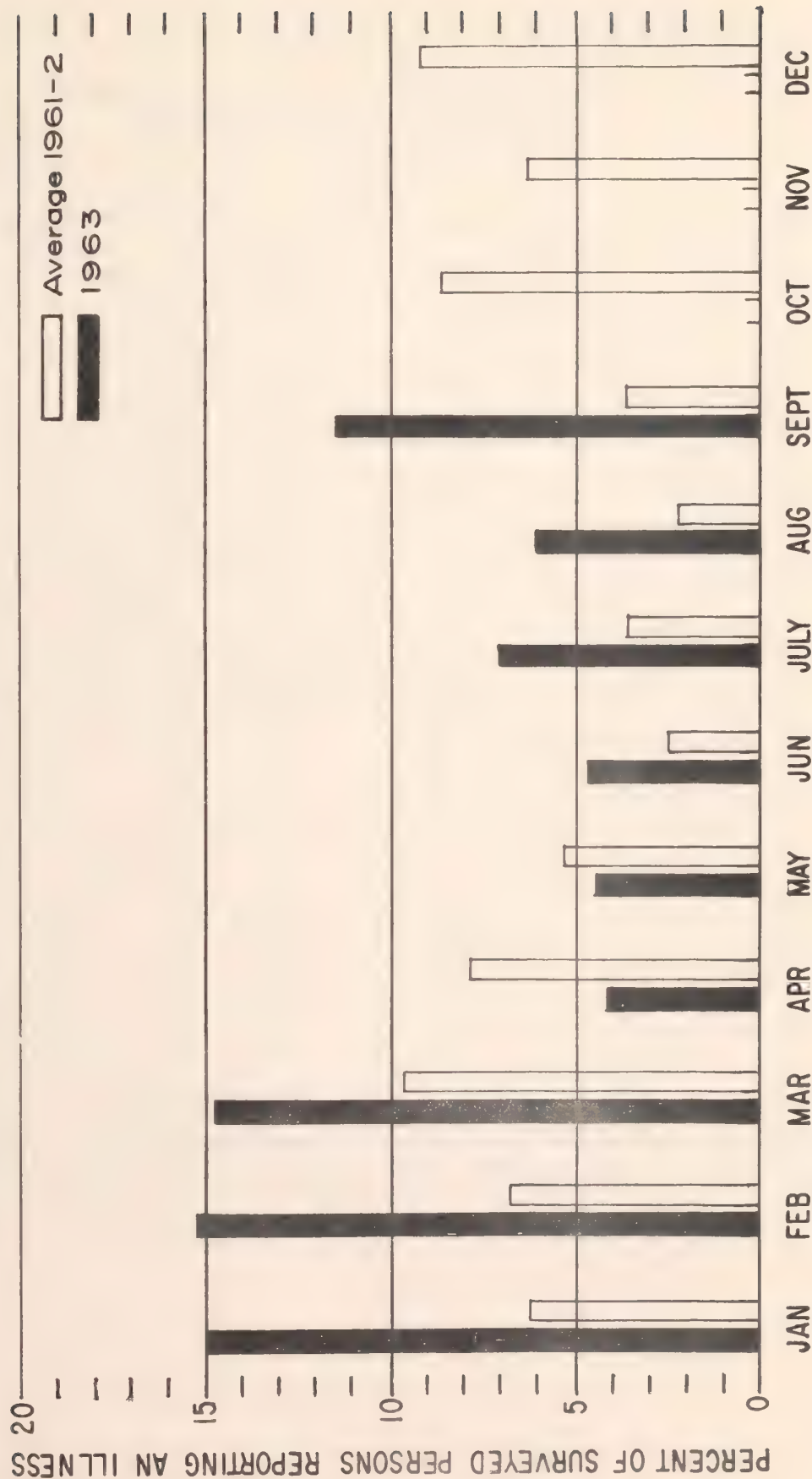


Table 1

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Third Quarter, 1963 and 1960-1962

Vital Event	JULY - SEPTEMBER				JANUARY - SEPTEMBER	
	Number		Rate*		Rate*	
	1963	Average 1960-62	1963	Average 1960-62	1963	Average 1960-62
	All Races					
Marriages Recorded.....	2,634	2,533	11.3	10.7	10.1	10.0
Births.....	6,000	6,207	25.8	26.3	24.0	24.5
Deaths, all causes.....	2,769	2,650	11.9	11.2	13.3	12.3
Deaths, under one year.....	164	193	27.3	31.1	29.6	32.9
under 28 days.....	123	151	20.5	24.3	22.8	24.5
28 days-11 months...	41	42	6.8	6.8	6.8	8.4
White						
Marriages Recorded.....	1,720	1,596	12.0	10.6	10.5	9.9
Births.....	3,024	3,179	21.0	21.1	19.7	19.7
Deaths, all causes.....	1,884	1,829	13.1	12.1	14.8	13.4
Deaths, under one year.....	70	75	23.1	23.6	22.2	25.8
under 28 days.....	50	59	16.5	18.6	17.1	19.4
28 days-11 months...	20	16	6.6	5.0	5.1	6.4
Nonwhite						
Marriages Recorded.....	914	937	10.2	13.4	9.4	10.0
Births.....	2,976	3,028	33.4	43.3	30.8	33.0
Deaths, all causes.....	885	821	9.9	11.7	11.0	10.3
Deaths, under one year.....	94	118	31.6	39.0	37.1	40.4
under 28 days.....	73	92	24.5	30.4	28.5	29.8
28 days-11 months...	21	26	7.1	8.6	8.6	10.6

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1963 total population 924,000; white 570,000; nonwhite 354,000. Population for period 1960-1962 was taken as the average mid year population for the three years as adjusted from the 1960 U. S. Census, i.e., total population 939,000; white 610,000; nonwhite 329,000.

Table II

Resident Deaths From Selected Causes
Third Quarter, 1963 and 1960-1962

Cause of Death	JULY - SEPTEMBER				JANUARY - SEPTEMBER	
	Number		Rate Per 100,000*		Rate Per 100,000*	
	1963	Average 1960-62	1963	Average 1960-62	1963	Average 1960-62
All Causes	2,769	2,650	11.9	11.2	15.3	12.3
Tuberculosis (001-019).....	36	30	15.5	12.7	15.6	16.6
Syphilis (020-029).....	9	3	3.9	1.3	4.6	3.0
Cancer (140-205).....	463	481	198.8	203.9	213.3	204.3
Diabetes mellitus (260).....	51	56	21.9	23.7	31.5	27.4
Vascular lesions of the central nervous system (330-334).....	192	209	82.4	88.6	96.9	91.4
Diseases of the heart (410-443)	1,149	1,059	493.3	448.9	572.0	515.4
Influenza and pneumonia (480-483, 490-493).....	74	63	31.8	26.7	52.4	42.6
Nephritis and nephrosis (590-594).....	13	19	5.6	8.1	8.0	8.9
Puerperal causes (640-652, 670-689).....	3	3	1.3	1.2	1.0	0.9
Congenital malformations (750-759).....	41	38	17.6	16.1	13.2	16.3
Certain diseases of early infancy (760-776).....	102	136	43.8	57.6	46.2	55.0
Suicides (963, 970-979).....	30	23	12.9	9.7	10.7	9.6
Homicides (964, 980-999).....	42	30	18.0	12.7	14.9	11.3
Accidents (800-802, 810-835, 840-962).....	141	114	60.5	48.3	54.7	45.4
Motor vehicles (810-835).....	46	37	19.8	15.7	19.0	14.6

*Rates shown for all causes are per 1,000 population

Table III

THIRD QUARTER 1963 and 1960-1962 AVERAGE

CASES AND DEATHS FROM SELECTED CAUSES AND INFANT DEATHS BY HEALTH DISTRICTS

Cause of Illness and Death	*Total City		Eastern		Western		Druid		Southeastern		Southern	
	1963	AVERAGE 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962
Infant deaths	164	190	49	56	49	52	31	45	19	25	14	12
Tuberculosis Cases all forms Deaths	199 36	195 25	65 9	61 10	39 6	44 6	60 4	47 4	16 9	23 3	19 3	19 2
Infectious Cases hepatitis Deaths	22 0	41 1.2	6 0	16 0	4 0	7 0.3	2 0	7 0.3	6 0	8 0.3	4 0	3 0.3
Lead paint Cases poisoning Deaths	22 1	25 2	11 0	10 0.7	7 1	6 0.7	3 0	7 0.3	0 0	2 0.3	1 0	0 0
Whooping Cases cough Deaths	6 0	22 0	1 0	5 0	0 0	6 0	0 0	6 0	5 0	4 0	0 0	1 0
Meningo- coccal infections	2 0	1.6 0	2 0	0.6 0	0 0	0.6 0	0 0	0.4 0	0 0	0 0	0 0	0 0
Measles Cases Deaths	258 0	129 0	109 0	49 0	24 0	19 0	38 0	26 0	67 0	22 0	18 0	12 0
Acute poliomyelitis (paralytic) Cases Deaths	0 0	15 0	0 0	4 0	0 0	6 0	0 0	1 0	0 0	3 0	0 0	1 0
Syphilis Cases Deaths	430 9	400 4	108 3	111 0.3	100 5	98 0.7	177 1	142 0.7	16 0	22 1.3	20 0	19 0.7

ALL FIGURES CORRECTED FOR RESIDENCE WITHIN MARYLAND.

*TOTALS INCLUDE SOME INTRANSFERS ALLOCATED TO BALTIMORE CITY BUT NOT OTHERWISE ALLOCATED TO HEALTH DISTRICTS.

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths, Tuberculosis Hospital Admissions
and Patients Receiving Chemotherapy
Third Quarter, 1963 and 1962

	JULY - SEPTEMBER		JANUARY - SEPTEMBER	
	Total		Total	
	1963	1962	1963	1962
Newly Reported Cases.....	191	182	617	596
White.....	81	69	245	254
Nonwhite.....	110	113	372	342
Reported After Death.....	15	11	37	56
Number of Readmissions*.....	32	16	96	86
White.....	14	10	45	37
Nonwhite.....	18	6	51	49
Number of Tuberculosis Deaths...	31	24	89	95
White.....	16	10	47	44
Nonwhite.....	15	14	42	51
Number of Patients Admitted to Tuberculosis Hospitals....	152	223	523	642
Number of Patients on Chemotherapy September 30.....			2,435	2,359
Started in current year.....			882	732
Started prior to current year.....			1,553	1,627

*Reactivated cases readmitted to current register

Table 1
Resident Births
Eastern Health District, 1962

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	7,193	3,728	3,465
Hospital.....	7,093	3,712	3,381
Home.....	100	16	84
Private Physician.....	57	12	45
Midwife.....	10	2	8
Other.....	33	2	31

Table 2
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Eastern Health District, 1962

Cause of Death	Total	White	Nonwhite
All Causes.....	3,838	2,859	979
Tuberculosis, all forms (001-019).....	37	13	24
Respiratory tuberculosis (001-008).....	33	12	21
Syphilis (020-029).....	6	2	4
Dysentery (045-048).....	1	1	..
Meningococcal infections (057).....	..	..	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074)....	8	4	4
Acute poliomyelitis (080).....	..	..	..
Encephalitis (082-083).....	..	..	..
Other infective and parasitic diseases (110-138).....	..	..	..
Malignant neoplasms (140-205).....	616	482	134
Lymphatic and hematopoietic (200-205)...	35	32	3
Benign and unspecified neoplasms (210-239)	11	8	3
Diabetes (260).....	94	71	23
Anemias (290-293).....	6	4	2
Other diseases of the blood and blood- forming organs (294-299).....	2	1	1
Vascular lesions of the central nervous system (330-334).....	304	230	74
Rheumatic fever (400-402).....	1	1	..

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Eastern Health District, 1962

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	1,662	1,361	301
Chronic rheumatic heart disease (410-416).....	36	31	5
Arteriosclerotic and degenerative heart disease (420-422).....	1,300	1,114	186
Other diseases of the heart (430-434).....	49	35	14
Hypertensive heart disease (440-443).....	277	181	96
Other hypertensive diseases (444-447).....	13	7	6
Arteriosclerosis (450).....	78	70	8
Other diseases of the circulatory system (451-468).....	56	43	13
Influenza and pneumonia (480-483, 490-493).....	137	96	41
Pneumonia (490-493).....	135	94	41
Mononucleosis (500-502).....	14	11	3
Diseases of the stomach and duodenum (540-541).....	24	19	5
Appendicitis (550-553).....	4	3	1
Intestinal obstruction and hernia (560-570).....	33	24	9
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	17	12	5
Cirrhosis of the liver (581).....	56	42	14
Nephritis and nephrosis (590-594).....	28	19	9
Hyperplasia of prostate (610).....	3	2	1
Perinatal causes (640-689).....	4	1	3
Congenital malformations (750-759).....	43	23	20
Certain diseases of early infancy (760-776).....	159	58	101
Pneumonia of newborn (763).....	6	3	3
Diarrhea of newborn (764).....	..	..	..
Idiocy, ill-defined and unknown conditions (780-795).....	7	5	2
All other diseases.....	219	144	75
Accidents, total (800-962, 965).....	134	70	64
Motor vehicle accidents (810-835).....	40	17	23
All other accidents.....	94	53	41
Suicides (963, 970-979).....	33	25	8
Homicides (964, 980-985).....	28	7	21

Table 3
Communicable Diseases Reported
Eastern Health District, 1962

Disease	Total	White	Nonwhite
Total.....	3,809	695	3,114
Chickenpox.....	297	136	161
Diphtheria.....	..	..	..
German measles.....	33	16	17
Gonococcal infections.....	1,681	91	1,590
Measles.....	550	131	419
Meningococcal infections.....	3	3	..
Mumps.....	304	71	233
Poliomyelitis, paralytic cases.....	..	..	..
Scarlet fever.....	64	40	24
Syphilis.....	459	62	397
Tuberculosis, all forms.....	260	92	168
Typhoid fever.....	..	..	..
Whooping cough.....	12	3	9
All others.....	146	50	96

Table 1

Resident Births
Western Health District, 1962

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	4,811	1,766	3,045
Hospital.....	4,715	1,751	2,964
Home.....	96	15	81
Private Physician.....	49	11	38
Midwife.....	18	3	15
Other.....	29	1	28

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Western Health District, 1962

Cause of Death	Total	White	Nonwhite
All Causes.....	2,310	1,339	971
Tuberculosis, all forms (001-019).....	23	9	14
Respiratory Tuberculosis (001-008).....	23	9	14
Syphilis (020-029).....	7	4	3
Meningococcal infections (057).....	..	..	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	7	2	5
Encephalitis (082-083).....	1	1	..
Infectious hepatitis (092).....	1	1	..
Malignant neoplasms (140-205).....	334	197	137
Lymphatic and hematopoietic (200-205)....	24	17	7
Benign and unspecified neoplasms (210-239)..	8	1	7
Diabetes (260).....	53	29	24
Anemias (290-293).....	5	2	3
Other diseases of the blood and blood- forming organs (294-299).....	2	2	..
Vascular lesions of the central nervous system (330-334).....	172	105	67
Rheumatic fever (400-402).....	..	..	..

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Western Health District, 1962

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	955	628	327
Chronic rheumatic heart disease (410-416).....	21	15	6
Arteriosclerotic and degenerative heart disease (420-422).....	721	519	202
Other diseases of the heart (430-434).....	26	15	11
Hypertensive heart disease (440-443).....	187	79	108
Other hypertensive diseases (444-447).....	14	4	10
Arteriosclerosis (450).....	33	24	9
Other diseases of the circulatory system (451-468).....	35	20	15
Influenza and pneumonia (480-483, 490-493).. Pneumonia (490-493).....	59 58	31 30	28 28
Bronchitis (500-502).....	9	5	4
Ulcer of the stomach and duodenum (540-541).. Appendicitis (550-553).....	21 4	19 2	2 2
Intestinal obstruction and hernia (560-570).. Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	19 6	13 1	6 5
Cirrhosis of the liver (581).....	44	27	17
Nephritis and nephrosis (590-594).....	16	6	10
Hyperplasia of prostate (610).....	4	2	2
Puerperal causes (640-689).....	3	1	2
Congenital malformations (750-759).....	29	14	15
Certain diseases of early infancy (760-776).. Pneumonia of newborn (763).....	127 5	39 ..	88 5
Diarrhea of newborn (764).....	..	..	..
Senility, ill-defined and unknown conditions (780-795).....	2	1	1
All other diseases.....	172	87	85
Accidents, total (800-962, 965).....	107	50	57
Motor vehicle accidents (810-835).....	41	18	23
All other accidents.....	66	32	34
Suicides (963, 970-979).....	12	9	3
Homicides (964, 980-985).....	26	3	23

Table 3

Communicable Diseases Reported
Western Health District, 1962

Disease	Total	White	Nonwhite
Total.....	2,323	419	1,904
Chickenpox.....	120	48	72
Diphtheria.....	..	..	..
German measles.....	8	3	5
Gonococcal infections.....	1,053	87	966
Measles.....	323	117	206
Meningococcal infections.....	..	..	..
Mumps.....	117	20	97
Poliomyelitis, paralytic cases.....	..	..	..
Scarlet fever.....	17	11	6
Syphilis.....	425	45	380
Tuberculosis, all forms.....	157	53	104
Typhoid fever.....	..	..	..
Whooping cough.....	6	2	4
All others.....	97	33	64

Table 1

Resident Births
Druid Health District, 1962

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	4,730	1,524	3,206
Hospital.....	4,615	1,515	3,100
Home.....	115	9	106
Private Physician.....	67	5	62
Midwife.....	15	1	14
Other.....	33	3	30

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Druid Health District, 1962

Cause of Death	Total	White	Nonwhite
All Causes.....	2,703	1,380	1,323
Tuberculosis, all forms (001-019).....	25	9	16
Respiratory tuberculosis (001-008).....	24	9	15
Syphilis (020-029).....	9	2	7
Meningococcal infections (057).....	..	..	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	6	4	2
Encephalitis (082-083).....	..	..	..
Infectious hepatitis (092).....	2	1	1
Other infective and parasitic diseases (110-138).....	1	..	1
Malignant neoplasms (140-205).....	429	242	187
Lymphatic and hematopoietic (200-205)....	32	23	9
Benign and unspecified neoplasms (210-239).....	7	6	1
Diabetes (260).....	58	27	31
Anemias (290-293).....	..	..	..
Other diseases of the blood and blood- forming organs (294-299).....	1	..	1
Vascular lesions of the central nervous system (330-334).....	187	82	105
Rheumatic fever (400-402).....	..	..	..

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
 Druid Health District, 1962

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	1,193	694	499
Chronic rheumatic heart disease (410-416).....	23	11	12
Arteriosclerotic and degenerative heart disease (420-422).....	873	583	90
Other diseases of the heart (430-434).....	35	14	21
Hypertensive heart disease (440-443).....	262	86	176
Other hypertensive diseases (444-447).....	17	4	13
Arteriosclerosis (450).....	30	19	11
Other diseases of the circulatory system (451-468).....	40	19	21
Influenza and pneumonia (480-483, 490-493).....	95	39	56
Pneumonia (490-493).....	93	39	54
Bronchitis (500-502).....	4	2	2
Ulcer of the stomach and duodenum (540-541).....	18	7	11
Appendicitis (550-553).....	3	2	1
Intestinal obstruction and hernia (560-570).....	16	9	7
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	13	4	9
Cirrhosis of the liver (581).....	46	17	29
Nephritis and nephrosis (590-594).....	20	10	10
Hyperplasia of prostate (610).....	4	1	3
Superficial causes (640-689).....	4	1	3
Congenital malformations (750-759).....	17	7	10
Certain diseases of early infancy (760-776).....	127	32	95
Pneumonia of newborn (763).....	9	1	8
Diarrhea of newborn (764).....	1	..	1
Idiocy, ill-defined and unknown conditions (780-795).....	8	5	3
All other diseases.....	153	60	93
Accidents, total (800-962, 965).....	118	59	59
Motor vehicle accidents (810-835).....	29	13	16
All other accidents.....	89	46	43
Suicides (963, 970-979).....	18	13	5
Homicides (964, 980-985).....	34	3	31

Table 3

Communicable Diseases Reported
Druid Health District, 1962

Disease	Total	White	Nonwhite
Total.....	3,276	545	2,731
Chickenpox.....	238	152	86
Diphtheria.....	..	..	..
German measles.....	14	3	11
Gonococcal infections.....	1,750	76	1,674
Measles.....	381	150	231
Meningococcal infections.....	..	..	..
Mumps.....	103	42	61
Poliomyelitis, paralytic cases.....	..	..	..
Scarlet fever.....	17	14	3
Syphilis.....	501	37	464
Tuberculosis, all forms.....	183	43	140
Typhoid fever.....	1	0	1
Whooping cough.....	12	3	9
All others.....	76	25	51

Table 1

Resident Births
Southeastern Health District, 1962

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	3,382	3,022	360
Hospital.....	3,356	3,004	352
Home.....	26	18	8
Private Physician.....	15	10	5
Midwife.....	6	4	2
Other.....	5	4	1

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southeastern Health District, 1962

Cause of Death	Total	White	Nonwhite
All Causes.....	1,659	1,536	123
Tuberculosis, all forms (001-019).....	29	25	4
Respiratory tuberculosis (001-008).....	27	23	4
Syphilis (020-029).....	1	1	..
Dysentery (045-048).....	..	..	..
Meningococcal infections (057).....	..	..	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	3	3	..
Encephalitis (082-083).....	..	..	..
Other infective and parasitic diseases (110-138).....	..	..	..
Malignant neoplasms (140-205).....	284	270	14
Lymphatic and hematopoietic (200-205)....	28	28	..
Benign and unspecified neoplasms (210-239).	8	6	2
Diabetes (260).....	46	44	2
Anemias (290-293).....	3	2	1
Other diseases of the blood and blood- forming organs (294-299).....	..	..	..
Vascular lesions of the central nervous system (330-334).....	115	104	11
Rheumatic fever (400-402).....	..	..	..

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southeastern Health District, 1962

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	725	685	40
Chronic rheumatic heart disease (410-416).....	14	14	..
Arteriosclerotic and degenerative heart disease (420-422).....	600	571	29
Other diseases of the heart (430-434).....	18	16	2
Hypertensive heart disease (440-443).....	93	84	9
Other hypertensive diseases (444-447).....	1	1	..
Arteriosclerosis (450).....	17	17	..
Other diseases of the circulatory system (451-468).....	19	17	2
Influenza and pneumonia (480-483, 490-493)...	43	39	4
Pneumonia (490-493).....	43	39	4
Bronchitis (500-502).....	8	8	..
Ulcer of the stomach and duodenum (540-541).....	11	11	..
Intestinal obstruction and hernia (560-570).....	16	16	..
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	4	3	1
Cirrhosis of the liver (581).....	29	27	2
Nephritis and nephrosis (590-594).....	15	14	1
Hyperplasia of prostate (610).....	6	5	1
Puerperal causes (640-689).....	1	1	..
Congenital malformations (750-759).....	17	17	..
Certain diseases of early infancy (760-776).....	49	44	5
Pneumonia of newborn (763).....	3	2	1
Senility, ill-defined and unknown conditions (780-795).....	8	8	..
All other diseases.....	101	82	19
Accidents, total (800-962, 965).....	70	60	10
Motor vehicle accidents (810-835).....	24	21	3
All other accidents.....	46	39	7
Suicides (963, 970-979).....	21	21	..
Homicides (964, 980-985).....	9	5	4

Table 3

Communicable Diseases Reported
Southeastern Health District, 1962

Disease	Total	White	Nonwhite
Total.....	1,167	819	348
Chickenpox.....	137	120	17
Diphtheria.....	..	..	..
German measles.....	22	20	2
Gonococcal infections.....	279	132	147
Measles.....	236	180	56
Meningococcal infections.....	..	..	..
Mumps.....	164	124	40
Poliomyelitis, paralytic cases.....	..	..	..
Scarlet fever.....	27	25	2
Syphilis.....	113	66	47
Tuberculosis, all forms.....	114	91	23
Typhoid fever.....	..	..	..
Whooping cough.....	12	11	1
All others.....	63	50	13

Table 1

Resident Births
Southern Health District, 1962

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	2,130	1,265	865
Hospital.....	2,085	1,251	834
Home.....	45	14	31
Private Physician.....	30	11	19
Midwife.....	5	2	3
Other.....	10	1	9

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southern Health District, 1962

Cause of Death	Total	White	Nonwhite
All Causes.....	806	647	159
Tuberculosis, all forms (001-019).....	18	12	6
Respiratory tuberculosis (001-008).....	18	12	6
Syphilis (020-029).....	5	2	3
Dysentery (045-048).....	..	..	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	..	..	..
Acute poliomyelitis (080).....	..	..	..
Infectious hepatitis (092).....	..	..	..
Malignant neoplasms (140-205).....	117	97	20
Lymphatic and hematopoietic (200-205)....	12	10	2
Benign and unspecified neoplasms (210-239)...	3	2	1
Diabetes (260).....	24	18	6
Anemias (290-293).....	4	2	2
Vascular lesions of the central nervous system (330-334).....	37	25	12

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southern Health District, 1962

Cause of Death	Total	White	Nonwhite
diseases of the heart (410-443).....	350	304	46
Chronic rheumatic heart disease (410-416)...	10	9	1
Arteriosclerotic and degenerative heart disease (420-422).....	275	244	31
Other diseases of the heart (430-434).....	10	9	1
Hypertensive heart disease (440-443).....	55	42	13
Other hypertensive diseases (444-447).....	6	2	4
Arteriosclerosis (450).....	5	5	..
Other diseases of the circulatory system (451-468).....	6	4	2
Influenza and pneumonia (480-483, 490-493)...	21	16	5
Pneumonia (490-493).....	20	16	4
Bronchitis (500-502).....	5	4	1
Ulcer of the stomach and duodenum (540-541)...	3	1	2
Appendicitis (550-553).....	2	2	..
Intestinal obstruction and hernia (560-570)...	4	4	..
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	4	3	1
Cirrhosis of the liver (581).....	20	16	4
Nephritis and nephrosis (590-594).....	6	5	1
Hyperplasia of prostate (610).....	3	2	1
Periperal causes (640-689).....	..	..	..
Congenital malformations (750-759).....	12	8	4
Certain diseases of early infancy (760-776)...	36	21	15
Pneumonia of newborn (763).....	1	1	..
Senility, ill-defined and unknown conditions (780-795).....	4	4	..
All other diseases.....	46	40	6
Accidents, total (800-962, 965).....	47	35	12
Motor vehicle accidents (810-835).....	18	14	4
All other accidents.....	29	21	8
Suicides (963, 970-979).....	10	9	1
Homicides (964, 980-985).....	8	4	4

Table 3

Communicable Diseases Reported
Southern Health District, 1962

Disease	Total	White	Nonwhite
Total.....	683	294	389
Chickenpox.....	48	35	13
Diphtheria.....	..	..	..
German measles.....	10	4	6
Gonococcal infections.....	184	48	136
Measles.....	167	96	71
Meningococcal infections.....	1	..	1
Mumps.....	25	5	20
Poliomyelitis, paralytic cases....	..	..	..
Scarlet fever.....	18	10	8
Syphilis.....	126	27	99
Tuberculosis, all forms.....	65	43	22
Typhoid fever.....	..	..	..
Whooping cough.....	2	..	2
All others.....	37	26	11

Population Estimate - Baltimore, Maryland
July 1, 1963

The estimated population of Baltimore City for July 1, 1963 is 924,311. The white population is 570,163 and the nonwhite population is 354,148 or 38.3 per cent of the total. The city's population decreased by 7,891 persons between July 1, 1962 and July 1, 1963.

Yearly population change is based on three factors; the number of births and deaths occurring among city residents and the number of persons moving either into the city or from the city during the year. The number of births and deaths are available from a count of the birth and death certificates issued to residents during the year. Migration figures must be estimated using data previously shown to accurately indicate population movement.

The components used in determining the July 1, 1963 population are shown below.

Components of the 1963 Population Estimate

<u>Component</u>	<u>Total</u>	<u>White</u>	<u>Nonwhite</u>
Population - July 1, 1962	932,202	585,547	346,655
Births, July 1, 1962 - June 30, 1963	22,353	11,388	10,965
Deaths, July 1, 1962 - June 30, 1963	12,205	8,386	3,819
Estimated Net Migration	-18,039	-18,386	+ 347
Population - July 1, 1963	924,311	570,163	354,148

Although the city gained 10,148 residents during the year as a result of natural increase, the excess of births over deaths, population movements led to a net loss by migration of 18,039 persons from the city.

A comparison of this year's components of population change with those of the preceding year reveals that the population gain due to natural increase diminished by 1,216 persons. This decrease was caused by 1,095 additional deaths and 121 fewer births. The loss due to migration increased by 2,981 over the net out-migration of 15,058 persons during the July 1, 1961 - June 30, 1962 period. Among the white population the net migration rate was -3.1 per cent, the difference between an in-migration rate of 5.0 per cent and an out-migration rate of 8.1 per cent. During the preceding year, the in-migration rate was 5.2 per cent and the out-migration rate was 7.7 per cent. Net migration among the nonwhite population has been minimal during recent years with both the in-migration and out-migration rates being slightly over 2 per cent.

AGE DISTRIBUTION

Table 1 shows the age distribution of the 1963 estimated population by race. The change in the population according to broad age groups and race since the 1960 Census count is shown in Table 2.

Inspection of Table 2 reveals that in the three years since the 1960 Census:

1. The total number of persons under 20 years of age has increased by 10,242; the number of white residents has decreased by 8,758 while the number of nonwhite residents has increased by 19,000.
2. The population aged 20-64 years, which constitutes the backbone of the city's economy, has decreased by 29,139.
3. The number of residents 65 years of age and over has increased to 89,051 or 9.6 per cent of the total population.

The population changes described above are similar to those being experienced in many of the older cities. The increase in the number of persons in the younger age group, many of whom are in economically depressed circumstances, requires the expansion of health supervision for this population. The greatest proportionate increase in size of any age group is seen in the group 65 and over, a group with reduced income but with a high risk of chronic illness.

Table 1

Estimated Population by Age and Race
Baltimore - 1963

Age Group	Total	White	Nonwhite
All Ages	924,311	570,163	354,148
Under 5	104,120	51,839	52,281
5 - 9	91,701	47,408	44,293
10 - 14	82,781	44,943	37,838
15 - 19	71,071	41,888	29,183
20 - 24	54,513	31,979	22,534
25 - 29	50,812	29,092	21,720
30 - 34	54,382	31,027	23,355
35 - 39	60,863	36,534	24,329
40 - 44	62,192	39,341	22,851
45 - 49	59,190	39,611	19,579
50 - 54	54,265	38,093	16,172
55 - 59	47,903	34,882	13,021
60 - 64	41,467	31,372	10,095
65 - 69	33,668	26,794	6,874
70 - 74	25,352	20,684	4,668
75 - 79	16,405	13,562	2,843
80 - 84	9,024	7,537	1,487
85 and over	4,602	3,577	1,025

Table 2

Population Change by Race and Age Group
1960 Census - 1963

Age	1960 Census	1963	Change	Per Cent Change
Total				
All Ages	939,024	924,311	-14,713	- 1.6
Under 20	359,431	349,673	+10,242	+ 3.0
20 - 44	308,476	282,762	-25,714	- 8.3
45 - 64	206,250	202,825	- 3,425	- 1.7
65 and over	84,867	89,051	+ 4,184	+ 4.9
White				
All Ages	610,595	570,163	-40,432	- 6.6
Under 20	194,836	186,078	- 8,758	- 4.5
20 - 44	194,491	167,973	-26,518	-13.6
45 - 64	151,560	143,958	- 7,602	- 5.0
65 and over	69,708	72,154	+ 2,446	+ 3.5
Nonwhite				
All Ages	328,429	354,148	+25,719	+ 7.8
Under 20	144,595	163,595	+19,000	+13.1
20 - 44	113,985	114,789	+ 804	+ 0.7
25 - 64	54,690	58,867	+ 4,177	+ 7.6
65 and over	15,159	16,897	+ 1,738	+11.5



BALTIMORE CITY HEALTH DEPARTMENT
BUREAU OF BIOSTATISTICS

QUARTERLY

STATISTICAL

REPORT

BIRTHS

MARRIAGES

MORBIDITY

MORTALITY

Maryland Room
University of Maryland Library
College Park, Md.

Maryland Room
University of Maryland Library
College Park, Md.

FOURTH QUARTER 1963

MARCH 31, 1964 VOL.15 NO.4

BALTIMORE CITY HEALTH DEPARTMENT

Robert E. Farber, M.D.
Commissioner

BUREAU OF BIOSTATISTICS

Elizabeth B. Kelley, B.S.
Director

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation".

Quetelet

The Baltimore Quarterly Statistical Report is prepared by the Bureau of Biostatistics for the purpose of distributing to interested agencies and individuals, a quantitative and cumulative record of health conditions during the current year.

TABLE OF CONTENTS

	Page
A Summary of Vital Events	1 - 9
B Annual Rates by Month for Births and Selected Causes of Death	10
C Morbidity Rates by Month	11
D Average Morbidity Rates by Month	12
E Tables of Vital Events	13 -16
I Marriages, Births, Deaths by Race	13
II Deaths From Selected Causes	14
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	15
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths and Tuberculosis Hospital Admissions	16



BALTIMORE'S HEALTH RECORD FOR 1963

The number of city residents was estimated to be 924,000 on July 1, 1963, a decline of 8,000 during the year interval July 1, 1962 to June 30, 1963. The white population dropped from 585,000 to 570,000, a loss of 15,000, while the nonwhite residents increased by 7,000, from 347,000 to 354,000, the smallest numerical increase in one year since 1950. These population changes continue trends which have prevailed for almost fifteen years. The administrative implications of such trends are: (1) a continuous growth in the number of mothers of limited economic resources who seek prenatal, well baby, and other pediatric services in publicly financed facilities; (2) a growth in the number of school-age children, also of limited economic resources, whose health, dental care and medical care needs fall heavily as a responsibility upon the City Health Department; (3) persistence, if not growth, in such health problems as tuberculosis and syphilis which are highly associated with economically depressed circumstances; (4) a growth in public concern with the medical-social problems of the increasing number and percentage of aged residents of the city.

Maternal and Child Health

The number of live births which occurred in Baltimore City, which includes births to mothers who reside in surrounding counties, declined for the sixth consecutive year. In 1963 the total number of births

was approximately 35,400. This was 11 per cent lower than a peak of 39,680 reached in 1957. Remarkable is the fact that a decline of such magnitude takes place when the metropolitan area population has been growing at an annual rate of two per cent. There is clear indication that the fertility rate, the number of children per 1,000 women of childbearing age, has declined significantly, which parallels a nationwide trend. In fact there is reason to believe that the pattern of large families which developed soon after World War II is passing away to be replaced by smaller family types of the pre-war model. In any case, a considerable relief of pressure upon obstetrical beds and facilities has been the immediate result of these changing fertility trends.

Among city residents there were 22,118 births in 1963, a slight drop from 1962. Of interest, however, is the fact that the birth rate among nonwhite residents has dropped from 34.2 live births per 1,000 in 1960 to 30.6 in 1963, while the rate among white residents remains steady at 19.8.

The number of maternal deaths during 1963 declined to a previously recorded low figure of 7. The maternal death rate was 3.2 per 10,000 live births, 1.8 among white mothers and 4.6 among nonwhite mothers, all of which are indicative of a highly successful program of medical services adequate to minimize loss of life among childbearing women.

Infant Mortality

A bright spot on the health record of Baltimore City for 1963 was the reduction of infant deaths, the infant death rate being lower

than any since 1956. The number of births was substantially the same in 1963 and 1962. Nevertheless, the number of infant deaths in 1963 at 668 was 9 per cent lower than that of 1962. For all births, the 1963 infant mortality rate was 30.2 deaths per 1,000 live born while the rate for white infants was 21.7 and that for nonwhite infants was 39.1. A challenge to the public health authority is to reduce this difference. However, more than traditional medical services is required. The high nonwhite infant mortality rate is due to a high level of prematurity. Our best knowledge at this time indicates that reduction of this problem of prematurity can be achieved only if the pregnant mother follows optimum hygiene practices throughout the full course of pregnancy. This can be assured if mothers seek prenatal care early in pregnancy and if such matters as nutrition, work habits and limitation of smoking are given careful consideration.

It is the hope of the City Health Department, with a grant provided by the U. S. Children's Bureau, to develop an experimental comprehensive social and medical service for mothers in low economic circumstances to determine whether the usual high prematurity rate and infant mortality rate can be reduced.

Tuberculosis

One of the more important indices which can describe the extent to which a community is burdened by disease caused by tuberculosis is the incidence rate, that is the number of newly reported cases per 100,000 population. In 1963, the incidence of tuberculosis cases of public health significance was 86.1 per 100,000 total population, an

increase of 2.9 per cent over the equivalent rate for 1962. When expressed in terms of the number of new cases brought to the attention of the Health Department, these rates indicate that 796 cases were reported in 1963 as contrasted with 780 in 1962, and 749 in 1961. This would appear to be an alarming reversal of long time trends of decline. Indeed, it is indicative of the firm hold that tuberculosis has on the inner city segment of Baltimore. On the other hand, selective surveys of the tuberculin status of school age children indicate that the extent to which they are exposed is steadily declining from which we conclude that the transmission of new infection through the community has been impeded by control efforts. Of significance also, is the fact that admissions to tuberculosis hospitals in 1963 declined markedly as contrasted with 1962. This is due to the growing practice of treating patients at home with effective chemotherapeutic agents. Providing that appropriate isolation procedures can be introduced in the patient's household, and practiced by the patient in his interpersonal relations, home treatment for selected cases should reduce the long term disability customarily associated with tuberculosis.

Motor Vehicle Accidents

✓ The number of individuals injured in automobile accidents in Baltimore City during 1963 reached a new record peak. Recent trends in automobile accidents are shown in the accompanying table:

Motor Vehicle Accidents

<u>Year</u>	<u>Accidents Reported</u>	<u>Persons Injured</u>	<u>Persons Killed</u>
1963 (est.)	20,210	9,840	118
1962	18,736	8,854	106
1961	17,535	8,237	91
1960	18,292	8,257	110
1959	18,006	8,685	106

Obviously, we are faced by a situation which shows no improvement, and could be described as one which is deteriorating. In terms of dollars the automobile accident experience of Baltimore City costs the residents of the city approximately \$30,000,000 annually. It is sheer nonsense to expend hard earned money each and every year for a problem which can be curtailed through selective controls. Two concrete actions appear to be promising. The Pedestrian Protection Ordinance would, if passed, obligate the pedestrian to a higher level of discipline in his use of the streets and highways. The use of the Accident Investigation Division of the Police Department as a base for research and evaluation of accident control programs planned by the Commission of Traffic would constitute an additional logical step to stem the continuous rise in the city's accident experience.

Venereal Diseases

The number of infectious cases of syphilis continues to rise. In 1963, 442 cases were reported, up 15 per cent from 1962. The recent history of this disease can be seen from the table below.

Venereal Diseases

<u>Year</u>	<u>Number of Infectious Cases of Syphilis</u>
1950	361
1953	118
1955	172
1960	269
1961	381
1962	384
1963 (estimated)	442

To a considerable extent the rise in cases since 1960 can be explained by the increase in the number of Baltimore residents who are in low economic circumstances. Some would attribute the rise to changing mores in respect to sexual behavior. Inasmuch as the rise in syphilis cases has been experienced nation-wide, this may be a possible explanation. Here in Baltimore, however, it is a more reasonable explanation to assume that the rise in cases, primarily, is due to an increase in the number of residents who find themselves in socially and economically depressed conditions.

Chronic Diseases

Early in 1963, Baltimore experienced a sharp outbreak of influenza due to a virus, similar in character to that which caused the epidemic of the so-called Asian Influenza in 1957. As a result the death rate was affected adversely. Thus in 1963, there were 11,974 deaths among Baltimore residents, an increase of 636 as contrasted with 1962. The death rate in 1963 was 13.0 per 1,000 population up 6.5 per cent from 1962,

a change largely due to the influenza outbreak. Although such an outbreak will result in an increase in deaths attributed to pneumonia and influenza, the main effect is felt by chronically ill individuals, those with cardiovascular disease and cancer. This was the case in 1963. The number of deaths due to diseases of the heart rose from 4,895 in 1962 to 5,220 in 1963, while deaths due to cancer rose from 1,782 to 1,889. As more effective vaccines against influenza are prepared, it will be possible to protect older residents and particularly those with chronic illness, from the severe consequences of influenza. As a general recommendation, such individuals will benefit from vaccination with the existing vaccines, but it should be understood that the vaccine does not give, each year, uniform protection. In 1963, the vaccine then available did not give significant protection against the form of influenza which attacked the population.

Although, much of the loss of life due to chronic disease seems inevitable in the light of our present knowledge, a considerable number of lives can be saved by relatively simple hygienic practices or by specific medical procedures. Cancer of the lung accounted for 296 deaths in 1963. This is approximately at the same level as it has been for several years. The principal cause of this loss of life is cigarette smoking. Abandonment of this practice would substantially reduce this serious health problem. Cancer of the cervix accounted for the loss of 67 lives in 1963. More than half involved were women less than 60 years of age. Routine cytological examination of cervical specimens for child-bearing women, 30 years of age and over, would substantially reduce this problem.

The expected lifetime of adults is closely associated with overweight. The greater the departure of an individual from the normal weight range for his height and age, the less likely are his chances for survival. These relationships are known from extensive data assembled by insurance companies. There is every reason to believe that adherence to dietary and exercise regimes by individuals who are overweight, in accordance with recommendations by family physicians, would reduce the risk of disabling cardiovascular disease and extend the expected lifetime.

Conclusion

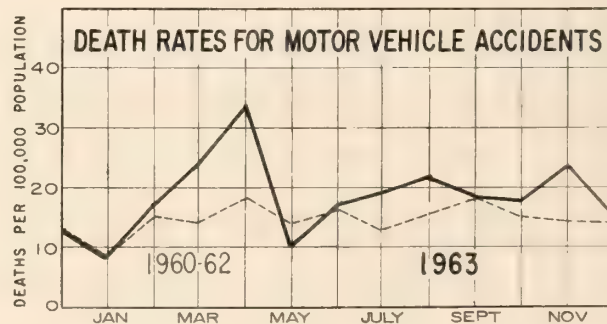
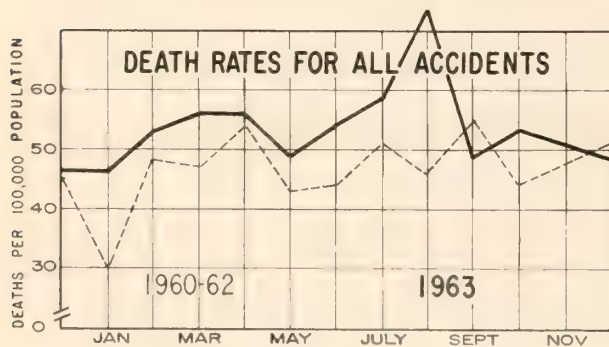
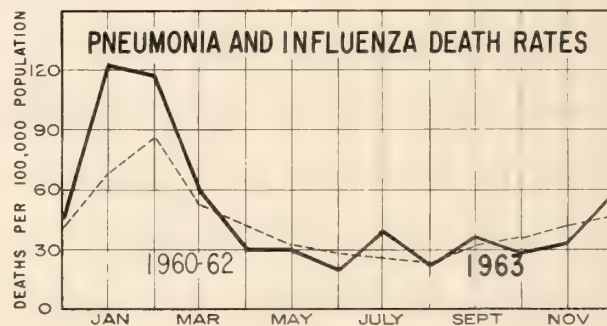
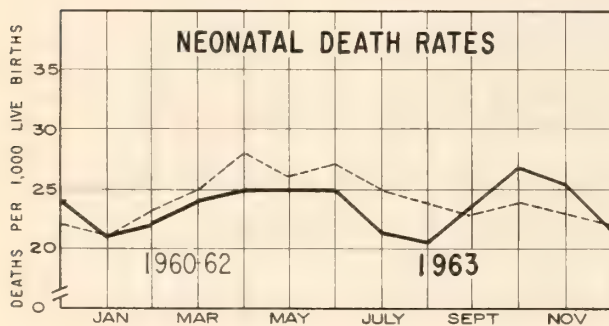
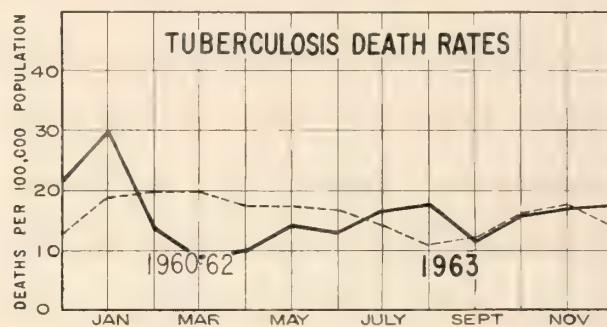
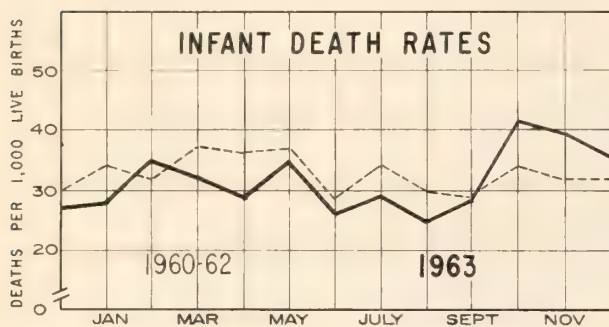
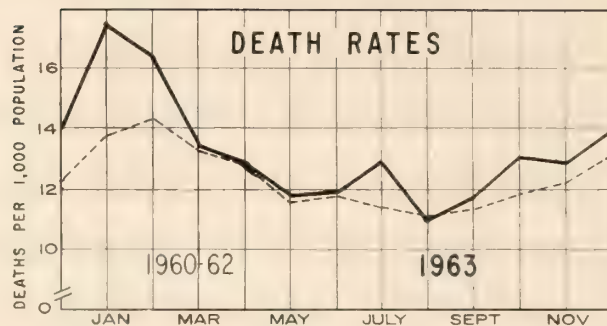
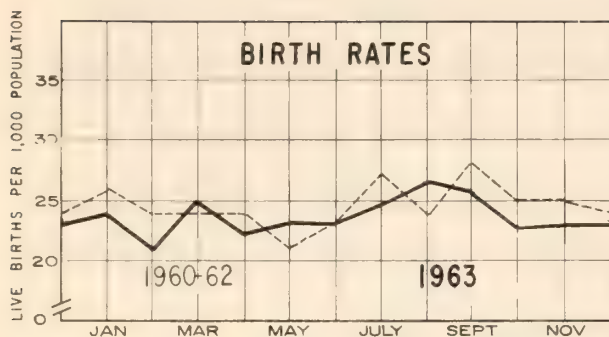
Some of the health problems which face the community exist because adult individuals fail to take the initiative or exert the discipline which can gain for themselves and their children a better state of health or a longer lifetime. Professional and technical services as well as valid knowledge are available. Often they are not sought after nor used.

Further efforts will be made to encourage mothers, who are not accustomed to do so, to seek prenatal care early in pregnancy. Experimental programs are in draft which will seek to correct nutritional deficits of mothers during pregnancy. By these efforts it is hoped to reduce prematurity among mothers in low income circumstances.

The rise of syphilis cases results from an increase in the number of our residents who live under socially distressed conditions. To find cases early and treat them adequately with chemotherapeutic agents minimizes the serious sequelae of this disease. Such case-finding and treatment services will be vigorously carried out. Promiscuous

sexual relations which underlies the problem of syphilis also results in the disturbing social and medical problem of illegitimacy. This cannot be controlled by chemotherapy, nor any known acceptable medical procedure. Logical efforts at control can be based only on efforts to encourage a change in moral climate among residents of the city living in socially distressed conditions. Consequently, the Health Department will lend every effort to assist in neighborhood development work.

The burden of chronic diseases weighs heavily upon those individuals and families which must contend with these conditions. To a large extent, a stable relationship with a trusted family physician is the firmest support one can secure to reduce the disability of chronic illness. For residents of the city, 65 years of age and over, who have limited financial resources, the cost of care rendered by a family physician can be met from public funds through the Medical Assistance to the Aged Program. The onset of chronic illness in some instances can be prevented, in still other instances, it can be delayed. Cancer of the lung is an example of a fatal chronic illness, most cases of which can be prevented. Cancer of the cervix is an example of a chronic illness which can be prevented from causing long term disability or death. Diseases of the heart are chronic conditions whose onset can be delayed in many individuals. Every such opportunity to prevent chronic illness should be and will become priority business of the Health Department.



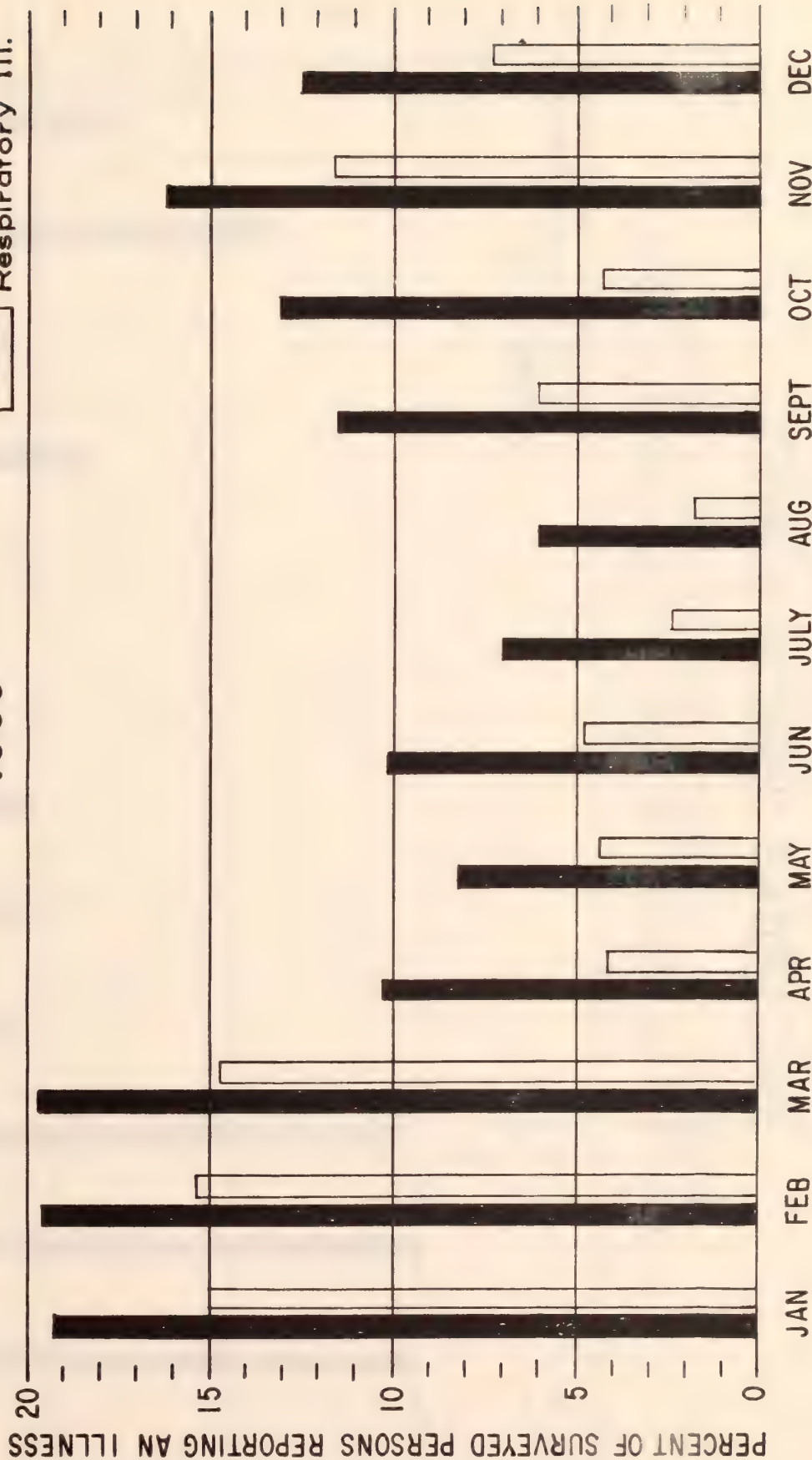
BALTIMORE CITY HEALTH DEPARTMENT

BALTIMORE HEALTH SURVEY

MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

1963

■ All Illness
□ Respiratory Ill.



BALTIMORE CITY HEALTH DEPARTMENT

BALTIMORE HEALTH SURVEY

MORBIDITY DUE TO ACUTE RESPIRATORY ILLNESS
AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

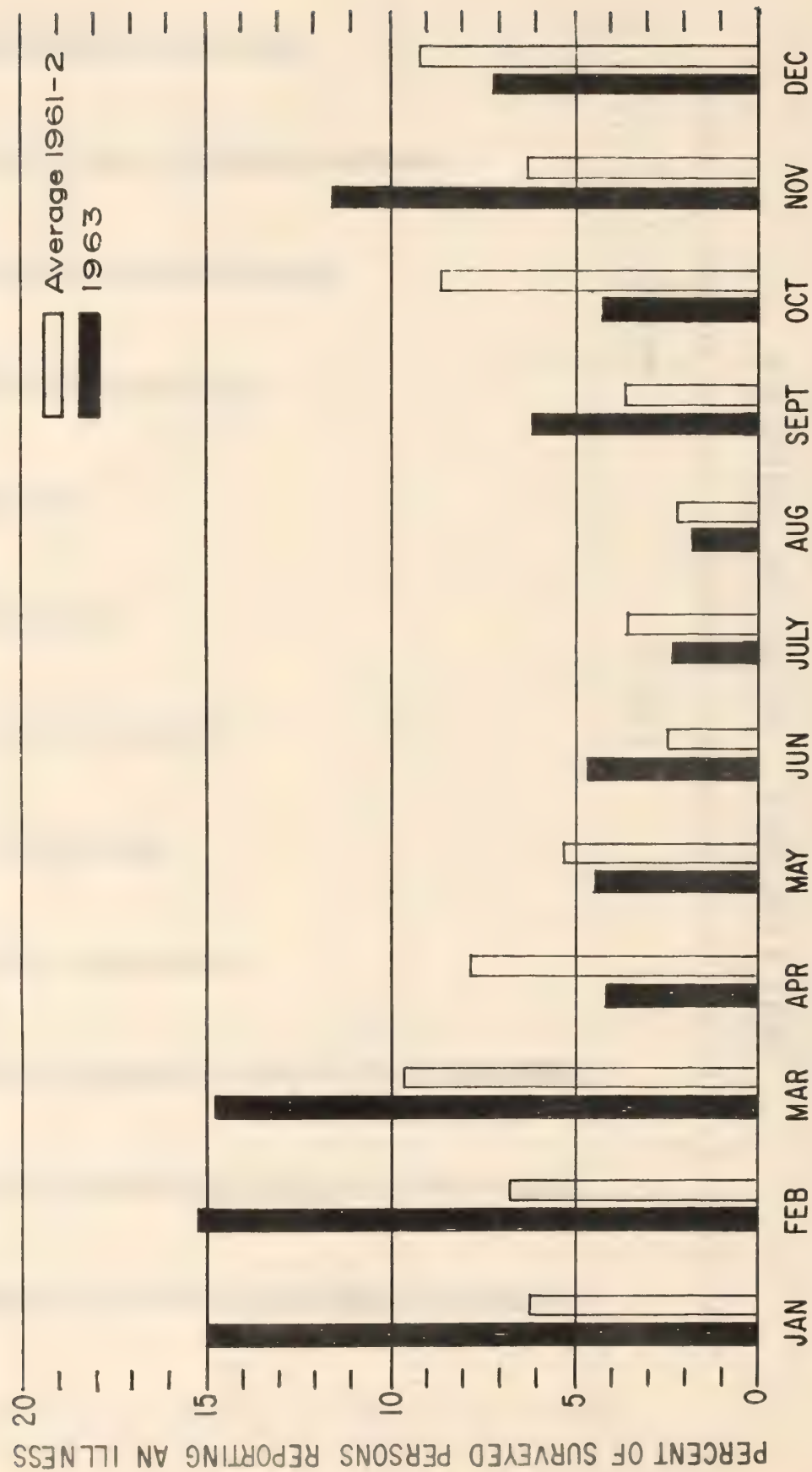


TABLE I

MARRIAGES RECORDED, RESIDENT BIRTHS, DEATHS AND INFANT DEATHS
AND CORRESPONDING RATES BY RACE: FOURTH QUARTER, 1963 AND 1960-1962

ITAL EVENT	October-December				January-December	
	Number		Rate*		Rate*	
	1963	Average 1960-1962	1963	Average 1960-1962	1963	Average 1960-1962
ALL RACES						
Marriages recorded.....	2,351	2,279	10.1	9.7	10.1	9.9
Births.....	5,318	5,727	22.8	24.3	23.7	24.4
Deaths, all causes.....	3,092	2,915	13.3	12.4	13.3	12.3
Deaths, under one year.....	189	187	35.5	32.7	31.0	32.8
under 28 days.....	135	134	25.4	23.4	23.4	24.2
28 days-11 months...	54	53	10.1	9.3	7.6	8.6
WHITE						
Marriages recorded.....	1,477	1,421	10.3	9.4	10.5	9.8
Births.....	2,709	2,933	18.9	19.5	19.5	19.6
Deaths, all causes.....	2,095	2,036	14.6	13.5	14.7	13.5
Deaths, under one year.....	76	75	28.1	25.6	23.7	25.7
under 28 days.....	51	58	18.8	19.8	17.6	19.5
28 days-11 months...	25	17	9.3	5.8	6.1	6.2
NONWHITE						
Marriages recorded.....	874	858	9.8	10.1	9.5	10.0
Births.....	2,609	2,794	29.2	32.8	30.4	33.0
Deaths, all causes.....	997	879	11.2	10.3	11.1	10.3
Deaths, under one year.....	113	112	43.3	40.1	38.6	40.3
under 28 days.....	84	76	32.2	27.2	29.4	29.2
28 days-11 months...	29	36	11.1	12.9	9.2	11.1

Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1963. Total, 924,000; White, 570,000; Nonwhite, 354,000.

TABLE II
RESIDENT DEATHS FROM SELECTED CAUSES
FOURTH QUARTER, 1963 AND 1960-1962

CAUSE OF DEATH	October-December				January-December	
	Number		Rate per 100,000*		Rate per 100,000	
	1963	Average 1960-62	1963	Average 1960-62	1963	Average 1960-62
All Causes	3,092	2,915	13.3	12.4	13.3	12.3
Tuberculosis (001-019).....	39	39	16.7	16.5	15.9	16.6
Syphilis (020-029).....	9	6	3.9	2.5	4.4	2.9
Cancer (140-205).....	512	461	219.8	195.4	214.9	201.9
Diabetes Mellitus (260).....	74	65	31.8	27.6	31.6	27.5
Vascular Lesions of the Central Nervous System (330-334).....	205	218	88.0	92.4	94.7	91.7
Diseases of the Heart (410-443).....	1,357	1,261	582.7	534.5	574.7	520.2
Influenza and Pneumonia (480-483, 490-493).....	85	95	36.5	40.3	48.4	42.0
Nephritis and Nephrosis (590-594).....	15	24	6.4	10.2	7.6	9.2
Puerperal Causes (640-652, 670-689).....	1	2	4.3	0.8	0.9	0.9
Congenital Malformations (750-759).....	49	30	21.0	12.7	15.2	15.4
Certain Diseases of Early Infancy (760-776).....	111	123	47.7	52.1	46.5	54.2
Suicides (963, 970-979).....	26	22	11.2	9.3	10.8	9.5
Homicides (964, 980-999).....	40	22	17.2	9.3	15.5	10.9
Accident (800-802, 810-835, 840-962).....	120	100	51.5	42.4	53.9	44.6
Motor Vehicle (810-835).....	44	34	18.9	14.4	18.9	14.5

*Rates shown for all causes are per 1,000 population.

TABLE III

CASES AND DEATHS FROM SELECTED CAUSES, AND INFANT DEATHS BY HEALTH DISTRICTS
FOURTH QUARTER, 1963 AND 1960-1962 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Western		Druid		Southeastern		Southern	
	1963	Average 1960-62	1963	Average 1960-62	1963	Average 1960-62	1963	Average 1960-62	1963	Average 1960-62	1963	Average 1960-62
Infant deaths	189	187	47	56	56	40	41	49	24	23	18	18
Tuberculosis, Cases	184	185	55	55	53	53	34	34	25	25	17	17
All forms Deaths	38	38.3	10	8	10	7	10	11	2	7	4	5
Syphilis Cases	358	416	85	101	93	110	129	136	19	31	28	30
Deaths	8	6.3	2	2.7	0	1	5	1.6	1	0.3	0	0
Infectious Cases	41	44	13	16	2	6	2	8	16	10	8	4
Deaths	1	2	1	1	0	1	0	0	0	0	0	0
Lead paint Cases	13	4.3	4	1.7	6	0.6	2	1.4	0	0	1	0.6
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Whooping Cases	8	12.3	7	6	0	1	1	4	0	1	0	0.3
Deaths	1	0	1	0	0	0	0	0	0	0	0	0
Meningococcal Cases	0	1.3	0	0.3	0	0.3	0	0	0	0.7	0	0
Deaths	1	1.0	0	0.3	1	0.3	0	0	0	0.3	0	0
Measles Cases	445	125	180	40	46	25	104	33	73	24	42	3
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Acute polio- Cases	0	18	0	8	0	2	0	2	0	4	0	2
Deaths	0	1.3	0	0.3	0	0	0	0	0	1	0	0
(paralytic)												

All figures corrected for residence within Maryland

*Totals include some intrastate transfers allocated to Baltimore City but not otherwise allocated to health districts.

TABLE IV

NEWLY REPORTED AND REACTIVATED CASES OF TUBERCULOSIS,
TUBERCULOSIS DEATHS AND TUBERCULOSIS HOSPITAL ADMISSIONS
FOURTH QUARTER 1963 AND 1962

	OCTOBER-DECEMBER		JANUARY-DECEMBER	
	Total		Total	
	1963	1962	1963	1962
Newly Reported Cases.....	179	184	796	780
White.....	71	69	316	323
Nonwhite.....	108	115	480	457
Reported After Death.....	10	15	47	51
Number of Readmissions*.....	19	23	115	109
White.....	12	16	57	53
Nonwhite.....	7	7	58	56
Number of Tuberculosis Deaths**..	25	38	114	133
White.....	11	23	58	67
Nonwhite.....	14	15	56	66
Number of Patients Admitted to Tuberculosis Hospitals.....	141	171	664	813
Number of Patients on Chemotherapy December 31.....			2,556	2,351
Started in current year.....			1,107	912
Started prior to current year.....			1,449	1,439

*Reactivated Cases Readmitted to Current Register

**Provisional

BALTIMORE CITY HEALTH DEPARTMENT BUREAU OF BIOSTATISTICS

QUARTERLY

STATISTICAL

REPORT

MARRIAGES

BIRTHS

MORTALITY

MORBIDITY

*Maryland Branch
University of Maryland Library
College Park, Md.*

FIRST & SECOND QUARTERS - 1964

SEPTEMBER 11, 1964 Vol. 16, Nos. 1 & 2

BALTIMORE CITY HEALTH DEPARTMENT

Robert E. Farber, M.D.
Commissioner

BUREAU OF BIOSTATISTICS

Elizabeth B. Kelley, B.S.
Director

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation".

Quetelet

The Baltimore Quarterly Statistical Report is prepared by the Bureau of Biostatistics for the purpose of distributing to interested agencies and individuals, a quantitative and cumulative record of health conditions during the current year.

TABLE OF CONTENTS

	Page
A Summary of Vital Events	1 - 5
B Annual Rates by Month for Births and Selected Causes of Death	6
C Morbidity Rates by Month	7
D Average Morbidity Rates by Month	8
E Tables of Vital Events	9 - 16
<u>FIRST QUARTER</u>	
I Marriages, Births, Deaths by Race	9
II Deaths From Selected Causes	10
III Cases and Deaths From Selected Causes and Infant Deaths by Health District	11
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths, Tuberculosis Hospital Admissions and Patients Receiving Chemotherapy	12
<u>SECOND QUARTER</u>	
I Marriages, Births, Deaths by Race	13
II Deaths From Selected Causes	14
III Cases and Deaths From Selected Causes and Infant Deaths by Health District	15
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths, Tuberculosis Hospital Admissions and Patients Receiving Chemotherapy	16
F Births, Deaths and Cases by Health Districts, 1963	17 - 31
Eastern Health District	17 - 19
Western Health District	20 - 22
Druid Health District	23 - 25
Southeastern Health District	26 - 28
Southern Health District	29 - 31



Vital Events - Baltimore, Maryland

January-June, 1964

Live Births

A total of 10,650 births was reported during the first six months of 1964 giving a birth rate of 23.2 per 1,000 population. The comparable figures for 1963 were 10,573 births for a birth rate of 22.9. The birth rate among white residents was 18.7 and among non-white 30.3, both rates remaining approximately the same as in 1963.

Mortality

There was a 9 per cent reduction in the overall death rate in Baltimore City from 13.8 deaths per 1,000 persons during the period January-June, 1963 to 12.6 for the comparable period in 1964. This decline from 6,337 deaths for the first six months of 1963 to 5,768 for the same period in 1964 was due primarily to a decrease in the number of deaths attributed to heart disease, cerebral hemorrhage, and influenza and pneumonia. Although this is an encouraging picture, it should be remembered that during the early part of 1963 the city was attacked by a wave of Asian type influenza and respiratory disease which resulted not only in a sharp increase in deaths from influenza and pneumonia but which also dealt a severe blow to persons 65 years of age and over among whom there were 428 more deaths during the first six months of 1963 than during the same period of this year.

Continuing on the favorable side, there was an 11 per cent decrease in the number of deaths due to tuberculosis--72 for the first

half of 1963 compared with 64 in 1964; a 13 per cent decrease in deaths due to diseases of early infancy--a drop from 218 deaths to 190 in comparable six month periods; and a 36 per cent decrease in deaths resulting from motor vehicle accidents, there having been 77 motor vehicle accident deaths reported during the first six months of 1963 compared to 49 in the same period this year.

On the unfavorable side, there were slight increase in the number of deaths due to cancer, diabetes, cirrhosis of the liver, congenital malformations, and suicide. The number of persons who took their own lives increased by 25 per cent from 40 persons during the period January-June, 1963 to 50 persons this year. Approximately one-half of these 50 persons were between the ages of 25 and 44 while 80 per cent were under the age of 55. Hopefully, the Mayor's committee to study the matter of suicide--one of the leading causes of violent death in Baltimore City--and the possibility of establishing a suicide prevention center at Baltimore City Hospitals will bring forth positive efforts to save these mentally distraught persons.

Infant Deaths and Maternal Mortality

The infant mortality rate, one of the most sensitive indices of a community's health status, decreased from 30.9 per 1,000 live births in 1963 to 29.5 this year in the comparable January-June periods. These rates represent a drop of 13 deaths in infants under one year of age in the first half-year from 327 infant deaths in the 1963 period to 314 in the comparable 1964 period. Most notable was an almost 9 per cent decrease in the nonwhite infant death rate which dropped from 40.3 to 36.7, representing 209 deaths in 1963 and 196 deaths in the comparable first six months of 1964. These figures,

however, are still far too high and only the future can tell what effect the new five-year Maternal and Infant Care Project aimed at the lowest socio-economic segment of Baltimore will have in lowering these high infant death rates.

A disturbing number of 7 maternal deaths occurred during the first six months of 1964. This number equals all maternal deaths reported during the twelve months of 1963. Of these 7 deaths 4 were among white residents and 3 were among nonwhite residents.

Communicable Diseases

Newly reported cases of tuberculosis decreased from 426 in the first six months of 1963 to 352 in the same period in 1964, a 17 per cent decrease. On a long term basis the first six months' experience of 1964 appears to be consistent with a previously noted trend of a 5 per cent average annual decline in newly reported illness from tuberculosis.

There were 1,765 cases of measles and 1,136 cases of German measles reported during the first six months of 1964 compared to 751 and 92 cases respectively in 1963. These diseases which occur primarily in childhood appear with increased frequency in cycles of two or three or more years, but this year cases of German measles reached epidemic proportion in some areas of the country. German measles which affects more adults than measles is particularly hazardous to women in early pregnancy.

In addition, reported cases of infectious hepatitis increased from 49 to 82, while there were decreases in the number of reported cases of scarlet fever, chickenpox and mumps. There was one

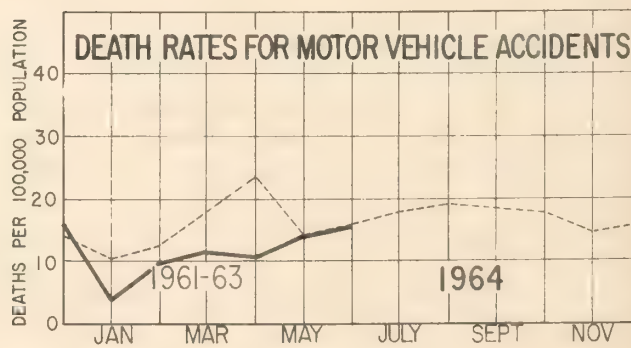
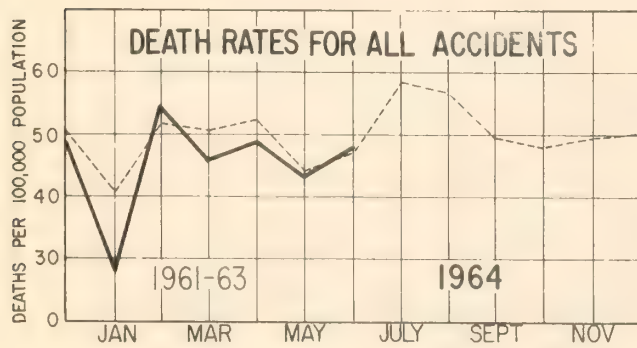
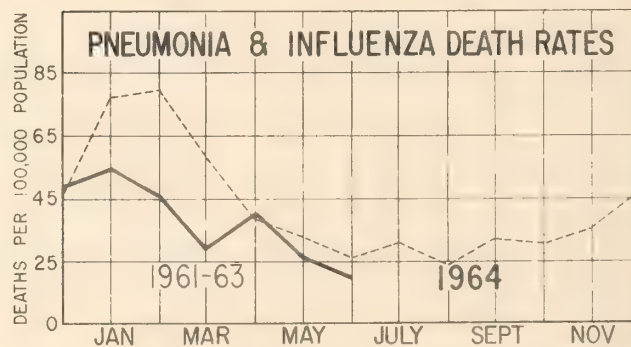
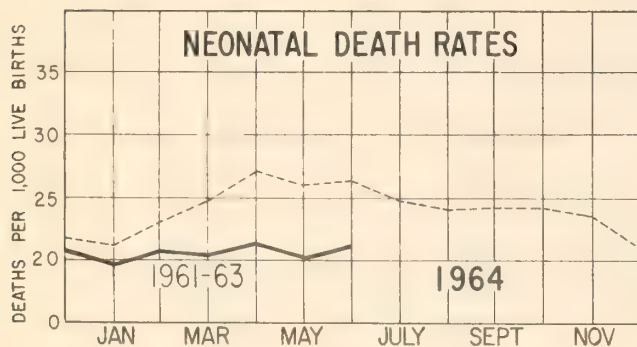
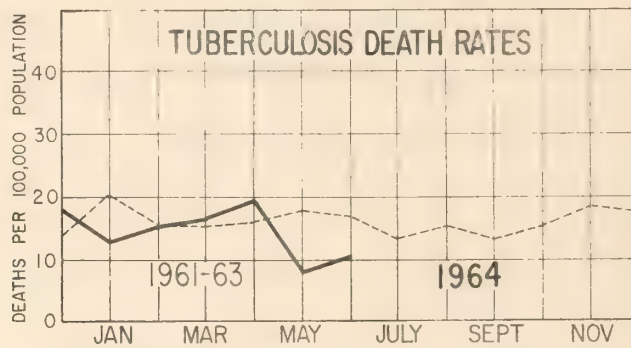
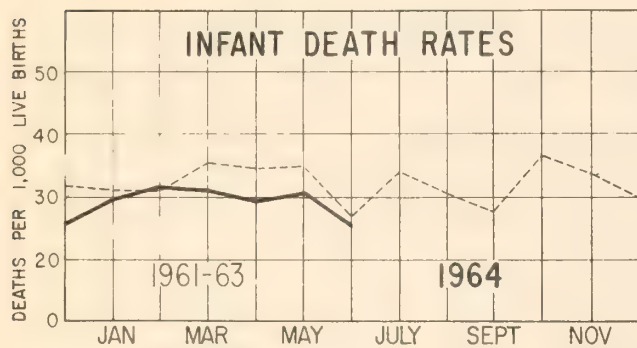
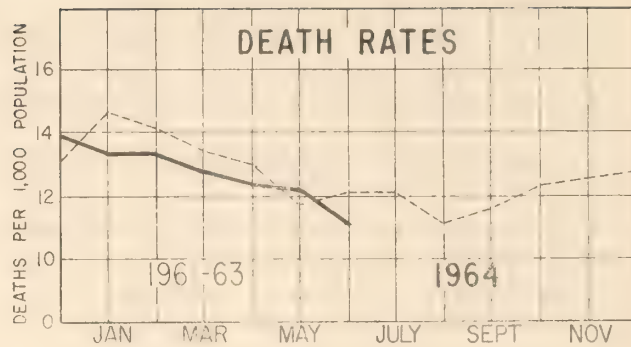
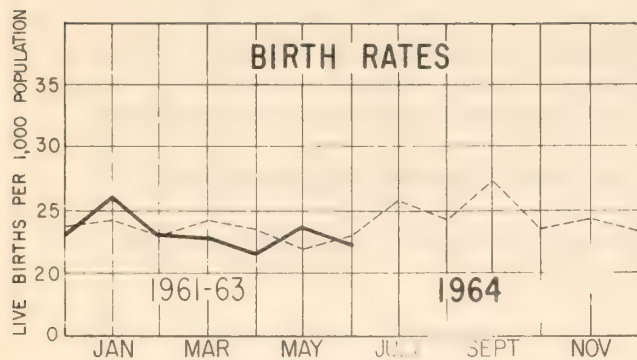
case of typhoid fever in a 12 year old boy who was believed to have been made ill from drinking water from a polluted stream. The venereal diseases showed a drop of 66 cases of syphilis from 821 to 755 in the six month period, while gonococcal infections rose from 2,379 to 2,493 in the same period.

Lead Paint Poisoning

The first two cases of lead paint poisoning for the year were reported in late April with this number increasing to nine by the end of June. There were 2 white and 7 nonwhite children among the victims. Two of the cases were twins with a third child in this family also found to have lead poisoning. This is the first time that a set of twins in a single family became lead paint poisoning victims at the same time. Multiple cases have occurred previously in single families not only through chewing lead paint but also by inhaling fumes from burning storage battery casings for fuel by low income families. No case of lead poisoning from burning battery casings, however, has been reported since 1957 due to the City Health Department's repeated warnings to junk dealers not to release such casings to the public.

From 1931 to June 30 of this year 996 children have been poisoned by ingesting lead paint. Of these 134 died. The City Health Department's Lead Paint Poisoning Prevention Committee has, for a number of years, explored the various avenues of prevention initiating programs aimed at residents, paint dealers, paint manufacturers, and the medical profession. Currently, the committee is guiding a three-year educational and study program in a selected area of the city

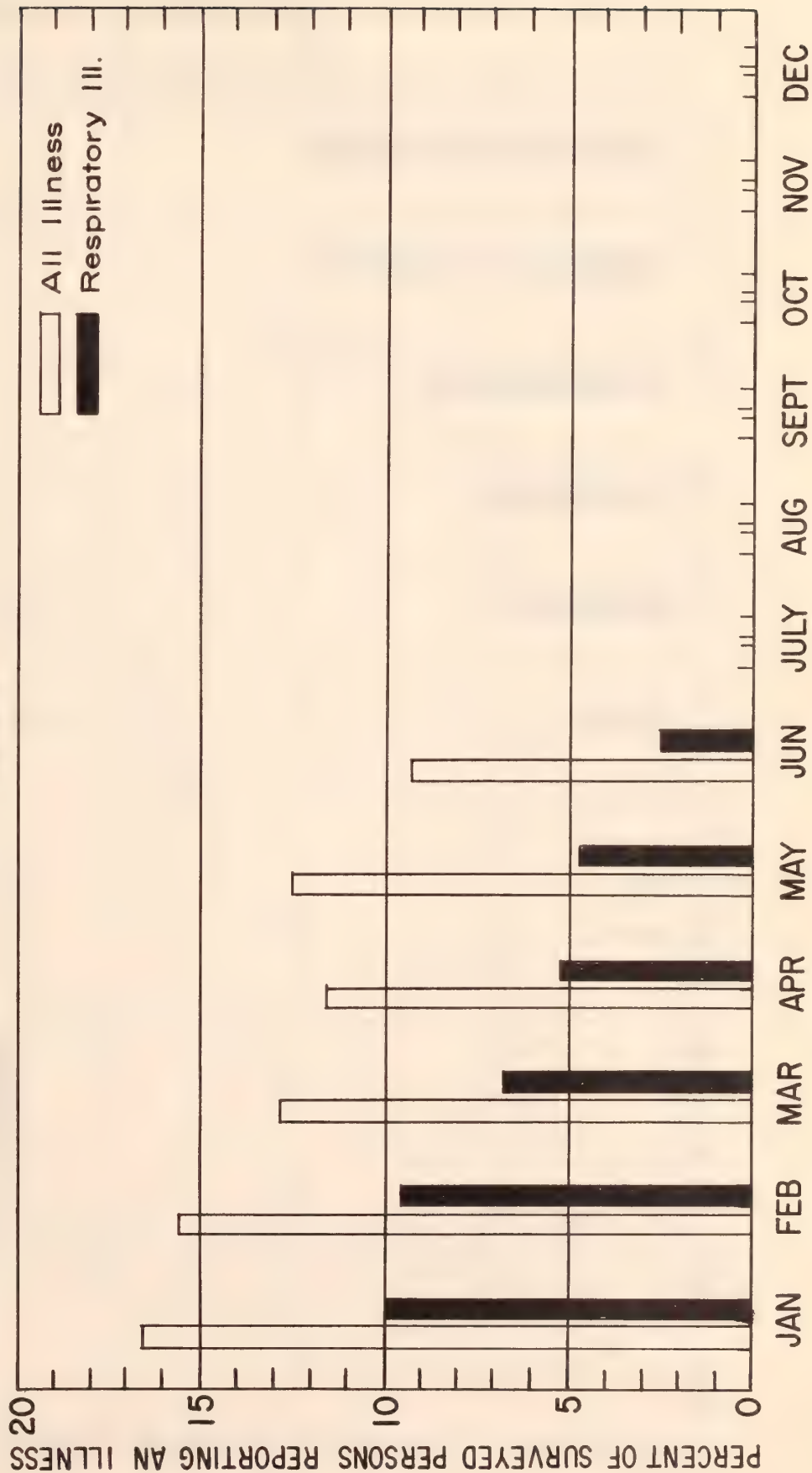
where the incidence of child lead paint poisoning has been consistently high. Through repeated home visits and reminder letters residents are not permitted to forget the lead danger to their children and are urged to remove all scaling paint. If this latest effort proves successful, the committee will consider extending it to all areas of the city where lead paint poisoning occurs.



BALTIMORE CITY HEALTH DEPARTMENT BALTIMORE HEALTH SURVEY

MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

1964



BALTIMORE CITY HEALTH DEPARTMENT
BALTIMORE HEALTH SURVEY

MORBIDITY DUE TO ACUTE RESPIRATORY ILLNESS
AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

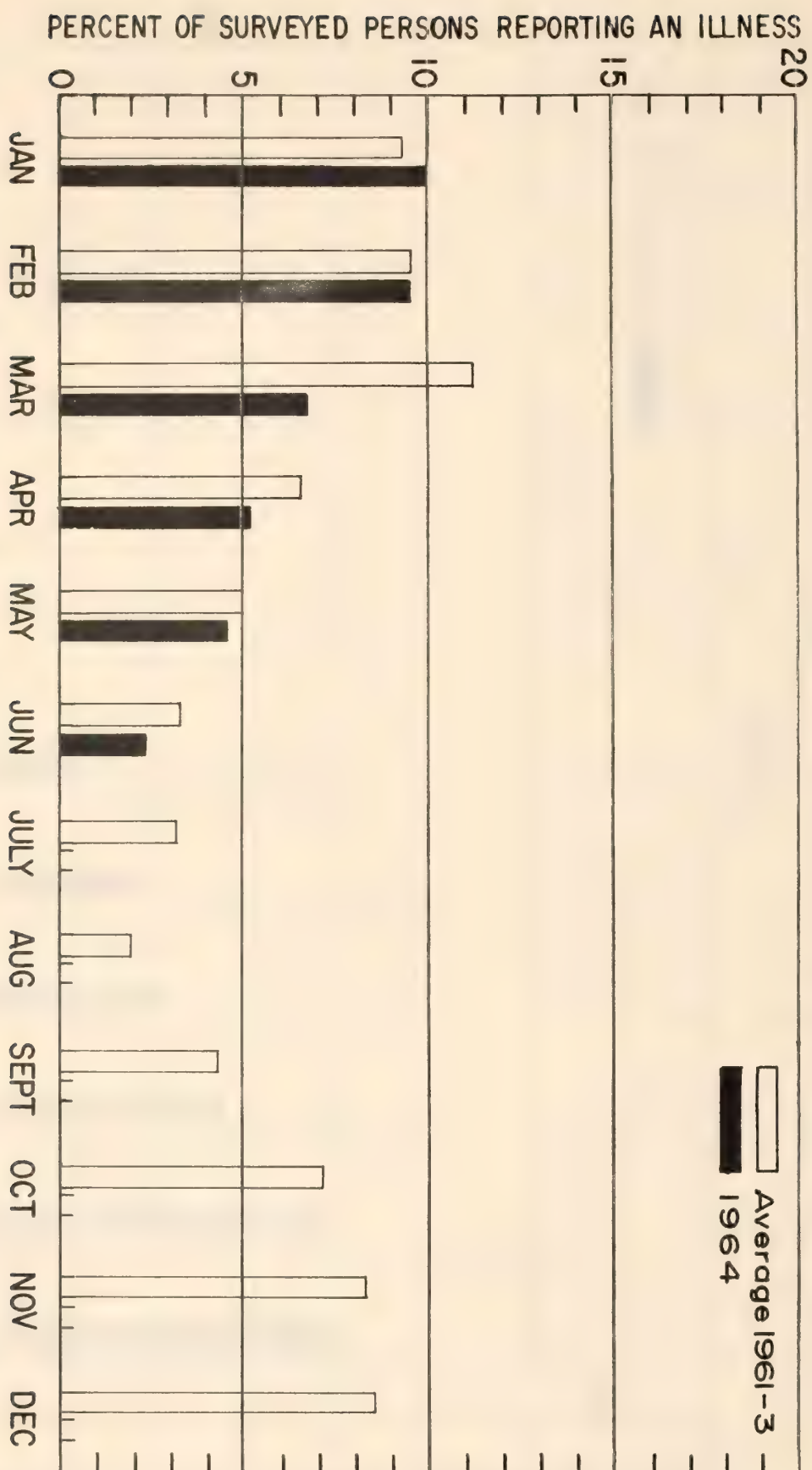


Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: First Quarter, 1964 and 1961-1963

Vital Event	JANUARY-MARCH			
	Number		Rate*	
	1964	Average 1961-1963	1964	Average 1961-1963
	All Races			
Marriages recorded.....	2,111	1,854	9.2	8.0
Births.....	5,516	5,448	23.9	23.5
Deaths, all causes.....	3,021	3,122	13.1	13.5
Deaths, under one year.....	168	170	30.5	31.2
under 28 days.....	117	120	21.2	22.0
28 days-11 months...	51	50	9.3	9.2
White				
Marriages recorded.....	1,328	1,143	9.3	7.8
Births.....	2,721	2,766	19.1	19.0
Deaths, all causes.....	2,066	2,136	14.5	14.7
Deaths, under one year.....	66	62	24.3	22.4
under 28 days.....	47	45	17.3	16.3
28 days-11 months...	19	17	7.0	6.1
Nonwhite				
Marriages recorded.....	783	711	8.9	8.2
Births.....	2,795	2,682	31.7	31.1
Deaths, all causes.....	955	986	10.8	11.4
Deaths, under one year.....	102	108	36.5	40.3
under 28 days.....	70	75	25.0	28.0
28 days-11 months...	32	33	11.5	12.3

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1963--total population 924,000; white, 570,000; nonwhite, 354,000.

Table II

Resident Deaths From Selected Causes
First Quarter, 1964 and 1961-1963

Cause of Death	JANUARY-MARCH			
	Number		Rate Per 100,000*	
	1964	Average 1961-1963	1964	Average 1961-1963
All Causes.....	3,021	3,122	13.1	13.5
Tuberculosis (001-019).....	35	40	15.2	17.2
Syphilis (020-029).....	10	8	4.3	3.4
Cancer (140-205).....	509	470	221.0	202.5
Diabetes mellitus (260).....	88	82	38.2	35.3
Vascular lesions of the central nervous system (330-334).....	197	236	85.5	101.7
Diseases of the heart (410-443).....	1,311	1,438	566.1	619.5
Influenza and pneumonia (480-483, 490-493).....	98	159	42.5	68.5
Cirrhosis of liver (581)	62	56	26.9	24.1
Nephritis and nephrosis (590-594).....	21	20	9.1	8.6
Puerperal causes (640-652, 670-689)...	3	2	1.3	0.9
Congenital malformations (750-759)....	30	39	13.0	16.8
Certain diseases of early infancy (760-776).....	102	109	44.3	47.0
Suicides (963, 970-979).....	28	20	12.2	8.6
Homicides (964, 980-999).....	20	26	8.7	11.2
Accidents (800-802, 810-835, 840-962).	98	110	42.5	47.4
Motor vehicles (810-835).....	19	31	8.2	13.4

*Rates shown for all causes are per 1,000 population.

TABLE III

CASES AND DEATHS FROM SELECTED CAUSES AND INFANT DEATHS BY HEALTH DISTRICTS
FIRST QUARTER 1964 AND 1961-1963 AVERAGE

Cause of Illness and Death	*TOTAL CITY		EASTERN		WESTERN		DRUID		SOUTHEASTERN		SOUTHERN	
	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963
Infant deaths	168	174	41	49	43	46	32	41	22	19	27	17
Tuberculosis, Cases all forms Deaths	154 35	196 37	37 7	59 8	34 10	41 10	47 6	48 8	27 7	28 5	9 3	20 4
Syphilis Cases Deaths	364 10	376 7.7	106 2	111 2	85 2	97 1.4	128 3	116 3.4	17 2	25 0.3	21 1	24 0.3
Infectious Cases hepatitis Deaths	36 0	44 2	17 0	18 1	1 0	5 0.7	4 0	6 0.3	12 0	11 0	2 0	4 0
Lead paint Cases poisoning Deaths	0 0	2 0	0 0	1 0	0 0	1 0	0 0	0 0	0 0	0 0	0 0	0 0
Whooping Cases cough Deaths	12 0	14 0.3	7 0	3 0	3 0	5 0	1 0	3 0	0 0	2 0.3	1 0	1 0
Meningococcal Cases infections Deaths	2 2	5 0.3	0 0	2.3 0	2 2	0.3 0	0 0	0.6 0	0 0	1 0.3	0 0	0.3 0
Measles Cases Deaths	1,158 0	523 0.3	306 0	188 0	252 0	.99 0	198 0	125 0.3	283 0	81 0	119 0	30 0
Acute polio- myelitis Cases (paralytic) Deaths	0 0	0 0.3	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0.3

All figures corrected for residence within Maryland

*Totals include some intranfers allocated to Baltimore City but not otherwise allocated to health districts

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths, Tuberculosis Hospital Admissions
and Patients Receiving Chemotherapy
First Quarter, 1964 and 1963

	JANUARY-MARCH	
	Total	
	1964	1963
Newly Reported Cases.....	142	205
White.....	61	77
Nonwhite.....	81	128
Reported After Death.....	14	13
Number of Readmissions*.....	26	32
White.....	14	14
Nonwhite.....	12	18
Number of Tuberculosis Deaths.....	28	33
White.....	15	18
Nonwhite.....	13	15
Number of Patients Admitted to Tuberculosis Hospitals.....	150	186
Number of Patients on Chemotherapy.....	2,813	2,298
Started in Current Year.....	257	291
Started in Prior Years.....	2,556	2,007

*Reactivated cases readmitted to current register

Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Second Quarter, 1964 and 1961-1963

Vital Event	APRIL-JUNE				JANUARY-JUNE	
	Number		Rate*		Rate*	
	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963
	All Races					
Marriages recorded.....	2,629	2,499	11.4	10.8	10.3	9.4
Births.....	5,134	5,345	22.3	23.0	23.2	23.4
Deaths, all causes.....	2,747	2,769	11.9	11.9	12.6	12.8
Deaths, under one year.....	146	174	28.4	32.6	29.5	31.9
under 28 days.....	105	141	20.4	26.4	20.9	24.2
28 days-11 months..	41	33	8.0	6.2	8.6	7.7
White						
Marriages recorded.....	1,777	1,661	12.5	11.4	11.0	9.7
Births.....	2,592	2,762	18.2	18.9	18.7	19.1
Deaths, all causes.....	1,846	1,917	13.0	13.2	13.8	14.0
Deaths, under one year.....	54	68	20.8	24.6	22.6	23.5
under 28 days.....	39	56	15.0	20.3	16.2	18.3
28 days-11 months..	15	12	5.8	4.3	6.4	5.2
Nonwhite						
Marriages recorded.....	852	838	9.7	9.7	9.3	9.0
Births.....	2,542	2,583	28.8	29.9	30.3	30.7
Deaths, all causes.....	901	852	10.2	9.7	10.5	10.7
Deaths, under one year.....	92	106	36.2	41.0	36.4	40.7
under 28 days.....	66	85	26.0	32.9	25.5	30.4
28 days-11 months..	26	21	10.2	8.1	10.9	10.3

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1963--total population 924,000; white, 570,000; nonwhite, 354,000.

Table II

Resident Deaths From Selected Causes
Second Quarter, 1964 and 1961-1963

Cause of Death	APRIL-JUNE				JANUARY-JUNE	
	Number		Rate Per 100,000*		Rate Per 100,000	
	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963
All Causes.....	2,747	2,769	11.9	11.9	12.6	13.0
Tuberculosis (001-019).....	29	39	12.6	16.8	13.9	16.9
Syphilis (020-029).....	9	3	3.9	5.6	4.1	4.3
Cancer (140-205).....	495	481	214.9	207.2	218.5	205.3
Diabetes mellitus (260).....	87	70	37.8	30.2	38.1	32.7
Vascular lesions of the central nervous system (330-334).....	196	197	85.1	84.9	85.5	93.6
Diseases of the heart (410-443)	1,127	1,197	489.2	515.7	530.6	568.4
Influenza and pneumonia (480-483, 490-493).....	65	75	28.2	32.3	35.5	50.7
Cirrhosis of liver (581).....	49	44	21.3	19.0	24.2	21.4
Nephritis and nephrosis (590-594).....	20	23	8.9	9.9	8.9	9.3
Puerperal causes (640-652, 670-689).....	2	2	0.9	0.9	1.1	0.9
Congenital malformations (750-759).....	26	27	11.3	11.6	12.2	14.1
Certain diseases of early infancy (760-776).....	88	122	38.2	52.6	41.4	50.0
Suicides (963, 970-979).....	22	25	9.5	10.8	10.9	9.5
Homicides (964, 980-999).....	27	24	11.7	10.3	10.2	10.8
Accidents (800-802, 810-835, 840-962).....	107	111	46.4	47.8	44.6	45.3
Motor vehicles (810-835).....	30	40	13.0	17.2	10.7	15.2

*Rates shown for all causes are per 1,000 population.

CASES AND DEATHS FROM SELECTED CAUSES, AND INFANT DEATHS BY HEALTH DISTRICTS
SECOND QUARTER 1964 and 1961-1963 AVERAGE

Cause of Illness and Death	*TOTAL CITY		EASTERN		WESTERN		DRUID		SOUTHEASTERN		SOUTHERN	
	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963
Infant deaths	146	173	42	55	40	44	30	42	17	20	14	11
Tuberculosis all forms	203 29	209 36	54 12	62 7	50 9	50 8	43 3	44 9	41 2	37 9	15 1	15 2
Syphilis	391 9	392 13	117 1	112 3	89 3	100 2.5	132 3	123 5	26 2	25 1.6	19 0	23 0.6
Infectious hepatitis	46 0	43 0.6	20 0	16 0	4 0	8.5 0	.7 0	6 0.3	13 0	8.5 0.3	2 0	4 0
Lead paint poisoning	9 1	15 1.6	1 0	4 0	4 0	6 0.3	4 1	4 0.7	0 0	0 0.3	0 0	1 0.3
Whooping cough	20 0	18 0.3	3 0	3 0	1 0	5 0.3	0 0	2 0	15 0	7.7 0	1 0	0.3 0
Meningococcal infections	3 1	2.3 1	0 0	0.3 0	0 0	0.3 0	1 0	0.7 0.4	1 1	1 0.3	1 0	0 0.3
Measles	607 0	788 0	170 0	271 0	156 0	129 0	85 0	169 0	129 0	143 0	67 0	76 0
Acute polio- myelitis (paralytic)	0 0	0 0.6	0 0	0 0.3	0 0	0 0	0 0	0 0	0 0	0 0.3	0 0	0 0

ALL FIGURES CORRECTED FOR RESIDENCE WITHIN MARYLAND

*TOTALS INCLUDE SOME INTRANSFERS ALLOCATED TO BALTIMORE CITY BUT NOT OTHERWISE ALLOCATED TO HEALTH DISTRICTS

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths, Tuberculosis Hospital Admissions
and Patients Receiving Chemotherapy
Second Quarter and Semi-Annual 1964 and 1963

	APRIL-JUNE		JANUARY-JUNE	
	Total		Total	
	1964	1963	1964	1963
Newly Reported Cases.....	210	221	352	426
White.....	90	87	151	164
Nonwhite.....	120	134	201	262
Reported After Death.....	6	9	20	22
Number of Readmissions*.....	30	32	56	64
White.....	18	17	32	31
Nonwhite.....	12	15	24	33
Number of Tuberculosis Deaths.....	27	25	55	58
White.....	11	13	26	31
Nonwhite.....	16	12	29	27
Number of Patients Admitted to Tuberculosis Hospitals.....	177	186	327	372
Number of Patients on Chemotherapy			2,573	2,214
Started in Current Year.....			563	571
Started in Prior Years.....			2,010	1,643

*Reactivated cases readmitted to current register

Table 1
Resident Births
Eastern Health District, 1963

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	7,130	3,682	3,448
Hospital.....	7,036	3,674	3,362
Home.....	94	8	86
Private Physician.....	23	3	20
Midwife.....	9	0	9
Other.....	62	5	57

Table 2
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Eastern Health District, 1963

Cause of Death	Total	White	Nonwhite
All Causes.....	3,825	2,882	943
Tuberculosis, all forms (001-019).....	32	13	19
Respiratory tuberculosis (001-008).....	30	12	18
Syphilis (020-029).....	10	4	6
Dysentery (045-048).....	..	..	..
Meningococcal infections (057).....	..	..	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	5	3	2
Acute poliomyelitis (080).....	..	..	..
Encephalitis (082-083).....	..	..	..
Other infective and parasitic diseases (110-138).....	2	..	2
Malignant neoplasms (140-205).....	616	493	123
Lymphatic and hematopoietic (200-205).....	53	46	7
Benign and unspecified neoplasms (210-239).. <td>17</td> <td>10</td> <td>7</td>	17	10	7
Diabetes (260).....	72	54	18
Anemias (290-293).....	10	5	5
Other diseases of the blood and blood- forming organs (294-299).....	3	3	..
Vascular lesions of the central nervous system (330-334).....	296	224	72
Rheumatic fever (400-402).....	..	..	..

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Eastern Health District, 1963

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	1,737	1,420	317
Chronic rheumatic heart disease (410-416)	40	31	9
Arteriosclerotic and degenerative heart disease (420-422)	1,384	1,176	208
Other diseases of the heart (430-434)....	47	31	16
Hypertensive heart disease (440-443).....	266	182	84
Other hypertensive diseases (444-447).....	14	6	8
Arteriosclerosis (450).....	65	59	6
Other diseases of the circulatory system (451-468).....	79	58	21
Influenza and pneumonia (480-483, 490-493)..	122	93	29
Pneumonia (490-493).....	85	85	..
Bronchitis (500-502).....	14	9	5
Ulcer of the stomach and duodenum (540-541)	25	21	4
Appendicitis (550-553).....	2	1	1
Intestinal obstruction and hernia (560-570)	25	22	3
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	13	9	4
Cirrhosis of the liver (581).....	56	39	17
Nephritis and nephrosis (590-594).....	23	13	10
Hyperplasia of prostate (610).....	2	2	..
Puerperal causes (640-689).....	2	1	1
Congenital malformations (750-759).....	34	14	20
Certain diseases of early infancy (760-776)	121	46	75
Pneumonia of newborn (763).....	4	1	3
Diarrhea of newborn (764).....	1	..	1
Senility, ill-defined and unknown conditions (780-795).....	8	5	3
All other diseases.....	214	156	58
Accidents, total (800-962, 965).....	131	67	64
Motor vehicle accidents (810-835).....	39	21	18
All other accidents.....	92	46	46
Suicides (963, 970-979).....	31	25	6
Homicides (964, 980-985).....	44	7	37

Table 3

Communicable Diseases Reported
Eastern Health District, 1963

Disease	Total	White	Nonwhite
Total.....	4,167	867	3,300
Chickenpox.....	332	99	233
Diphtheria.....	..	..	..
German measles.....	75	47	28
Gonococcal infections.....	1,835	103	1,732
Measles.....	718	217	501
Meningococcal infections.....	8	4	4
Mumps.....	277	141	136
Poliomyelitis, paralytic cases.....	..	..	..
Scarlet fever.....	109	78	31
Syphilis.....	436	57	379
Tuberculosis, all forms.....	237	76	161
Typhoid fever.....	..	..	..
Whooping cough.....	17	2	15
All others.....	123	43	80

Table 1

Resident Births
Western Health District, 1963

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	4,817	1,734	3,083
Hospital.....	4,725	1,715	3,010
Home.....	92	19	73
Private Physician.....	36	14	22
Midwife.....	29	3	26
Other.....	27	2	25

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Western Health District, 1963

Cause of Death	Total	White	Nonwhite
All Causes.....	2,521	1,379	1,142
Tuberculosis, all forms (001-019).....	35	21	14
Respiratory tuberculosis (001-008).....	35	21	14
Syphilis (020-029).....	9	2	7
Meningococcal infections (057).....	1	1	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	8	5	3
Encephalitis (082-083).....	1	..	1
Infectious hepatitis (092).....	2	..	2
Malignant neoplasms (140-205).....	369	216	153
Lymphatic and hematopoietic (200-205).....	26	18	8
Benign and unspecified neoplasms (210-239).. <td>8</td> <td>5</td> <td>3</td>	8	5	3
Diabetes (260).....	67	41	26
Anemias (290-293).....	7	5	2
Other diseases of the blood and blood- forming organs (294-299).....	3	1	2
Vascular lesions of the central nervous system (330-334).....	177	89	88
Rheumatic fever (400-402).....	..	..	..

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Western Health District, 1963

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	1,040	662	378
Chronic rheumatic heart disease (410-416)	15	10	5
Arteriosclerotic and degenerative heart disease (420-422).....	764	534	230
Other diseases of the heart (430-434)....	45	30	15
Hypertensive heart disease (440-443).....	216	88	128
Other hypertensive diseases (444-447).....	15	6	9
Arteriosclerosis (450).....	27	18	9
Other diseases of the circulatory system (451-468).....	38	20	18
Influenza and pneumonia (480-483, 490-493)..	98	50	48
Pneumonia (490-493).....	90	44	46
Bronchitis (500-502).....	5	3	2
Ulcer of the stomach and duodenum (540-541)	15	7	8
Appendicitis (550-553).....	3	1	2
Intestinal obstruction and hernia (560-570)	16	8	8
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	10	5	5
Cirrhosis of the liver (581).....	40	17	23
Nephritis and nephrosis (590-594).....	19	3	16
Hyperplasia of prostate (610).....	1	1	..
Puerperal causes (640-689).....	1	..	1
Congenital malformations (750-759).....	34	11	23
Certain diseases of early infancy (760-776)	126	37	89
Pneumonia of newborn (763).....	9	4	5
Diarrhea of newborn (764).....	1	1	..
Senility, ill-defined and unknown conditions (780-795).....	10	4	6
All other diseases.....	162	70	92
Accidents, total (800-962, 965).....	117	50	67
Motor vehicle accidents (810-835).....	43	14	29
All other accidents.....	74	36	38
Suicides (963, 970-979).....	23	14	9
Homicides (964, 980-985).....	34	6	28

Table 3

Communicable Diseases Reported
Western Health District, 1963

Disease	Total	White	Nonwhite
Total.....	2,064	265	1,799
Chickenpox.....	96	36	30
Diphtheria.....	..	..	..
German measles.....	15	6	9
Gonococcal infections.....	1,102	55	1,047
Measles.....	121	26	95
Meningococcal infections.....	..	..	..
Mumps.....	113	44	69
Poliomyelitis, paralytic cases.....	..	..	..
Scarlet fever.....	14	5	9
Syphilis.....	379	21	358
Tuberculosis, all forms.....	171	57	114
Typhoid fever.....	..	..	..
Whooping cough.....	2	..	2
All others.....	51	15	36

Table 1

Resident Births
Druid Health District, 1963

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	4,509	1,348	3,161
Hospital.....	4,436	1,342	3,094
Home.....	73	6	67
Private Physician.....	27	3	24
Midwife.....	9	0	9
Other.....	37	3	34

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Druid Health District, 1963

Cause of Death	Total	White	Nonwhite
All Causes.....	2,943	1,489	1,454
Tuberculosis, all forms (001-019).....	31	10	21
Respiratory tuberculosis (001-008).....	29	8	21
Syphilis (020-029).....	15	2	13
Meningococcal infections (057).....	..	..	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	3	2	1
Encephalitis (082-083).....	1	..	1
Infectious hepatitis (092).....	..	..	..
Other infective and parasitic diseases (110-138).....	2	..	2
Malignant neoplasms (140-205).....	457	245	212
Lymphatic and hematopoietic (200-205).....	37	24	13
Benign and unspecified neoplasms (210-239).. <td>11</td> <td>4</td> <td>7</td>	11	4	7
Diabetes (260).....	74	34	40
Anemias (290-293).....	7	2	5
Other diseases of the blood and blood- forming organs (294-299).....	2	2	..
Vascular lesions of the central nervous system (330-334).....	211	110	101
Rheumatic fever (400-402).....	..	..	..

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Druid Health District, 1963

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	1,274	711	563
Chronic rheumatic heart disease (410-416)	17	10	7
Arteriosclerotic and degenerative heart disease (420-422).....	965	617	348
Other diseases of the heart (430-434)....	44	14	30
Hypertensive heart disease (440-443).....	248	70	178
Other hypertensive diseases (444-447).....	18	2	16
Arteriosclerosis (450).....	33	18	15
Other diseases of the circulatory system (451-468).....	40	21	19
Influenza and pneumonia (480-483, 490-493).	115	60	55
Pneumonia (490-493).....	105	54	51
Bronchitis (500-502).....	10	9	1
Ulcer of the stomach and duodenum (540-541)	19	12	7
Appendicitis (550-553).....	1	1	..
Intestinal obstruction and hernia (560-570)	19	11	8
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	8	4	4
Cirrhosis of the liver (581).....	63	30	33
Nephritis and nephrosis (590-594).....	17	4	13
Hyperplasia of prostate (610).....	5	3	2
Puerperal causes (640-689).....	..	..	..
Congenital malformations (750-759).....	24	4	20
Certain diseases of early infancy (760-776)	99	16	83
Pneumonia of newborn (763).....	5	..	5
Diarrhea of newborn (764).....	2	..	2
Senility, ill-defined and unknown conditions (780-795).....	12	5	7
All other diseases.....	190	94	96
Accidents, total (800-962, 965).....	124	55	69
Motor vehicle accidents (810-835).....	38	13	25
All other accidents.....	86	42	44
Suicides (963, 970-979).....	16	13	3
Homicides (964, 980-985).....	42	5	37

Table 3

Communicable Diseases Reported
Druid Health District, 1963

Disease	Total	White	Nonwhite
Total.....	3,185	425	2,760
Chickenpox.....	98	39	59
Diphtheria.....	..	..	..
German measles.....	21	8	13
Gonococcal infections.....	1,817	99	1,718
Measles.....	200	29	171
Meningococcal infections.....	2	..	2
Mumps.....	182	122	60
Poliomyelitis, paralytic cases.....	..	..	..
Scarlet fever.....	24	12	12
Syphilis.....	565	47	518
Tuberculosis, all forms.....	206	52	154
Typhoid fever.....	2	1	1
Whooping cough.....	10	..	10
All others.....	58	16	42

Table 1
Resident Births
Southeastern Health District, 1963

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	3,441	3,065	376
Hospital.....	3,414	3,048	366
Home.....	27	17	10
Private Physician.....	10	8	2
Midwife.....	3	1	2
Other.....	14	8	6

Table 2
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southeastern Health District, 1963

Cause of Death	Total	White	Nonwhite
All Causes.....	1,845	1,699	146
Tuberculosis, all forms (001-019).....	18	13	5
Respiratory tuberculosis (001-008).....	18	13	5
Syphilis (020-029).....	5	5	..
Dysentery (045-048).....	1	1	..
Meningococcal infections (057).....	2	2	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	4	3	1
Encephalitis (082-083).....	1	1	..
Other infective and parasitic diseases (110-138).....	1	..	1
Malignant neoplasms (140-205).....	277	256	21
Lymphatic and hematopoietic (200-205).....	15	14	1
Benign and unspecified neoplasms (210-239).. <td>3</td> <td>3</td> <td>..</td>	3	3	..
Diabetes (260).....	55	50	5
Anemias (290-293).....	4	4	..
Other diseases of the blood and blood- forming organs (294-299).....	2	2	..
Vascular lesions of the central nervous system (330-334).....	128	115	13
Rheumatic fever (400-402).....	..	..	..

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southeastern Health District, 1963

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	828	785	43
Chronic rheumatic heart disease (410-416)	15	13	2
Arteriosclerotic and degenerative heart disease (420-422).....	682	648	34
Other diseases of the heart (430-434)....	27	25	2
Hypertensive heart disease (440-443).....	104	99	5
Other hypertensive diseases (444-447).....	7	7	..
Arteriosclerosis (450).....	24	23	1
Other diseases of the circulatory system (451-468).....	30	30	..
Influenza and pneumonia (480-483, 490-493)..	73	64	9
Pneumonia (490-493).....	72	63	9
Bronchitis (500-502).....	7	7	..
Ulcer of the stomach and duodenum (540-541)	7	7	..
Intestinal obstruction and hernia (560-570)	17	14	3
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	6	5	1
Cirrhosis of the liver (581).....	37	34	3
Nephritis and nephrosis (590-594).....	6	6	..
Hyperplasia of prostate (610).....	2	2	..
Puerperal causes (640-689).....	2	..	2
Congenital malformations (750-759).....	21	19	2
Certain diseases of early infancy (760-776)	53	48	5
Pneumonia of newborn (763).....	3	3	..
Senility, ill-defined and unknown conditions (780-795).....	4	4	..
All other diseases.....	121	101	20
Accidents, total (800-962, 965).....	73	65	8
Motor vehicle accidents (810-835).....	25	21	4
All other accidents.....	48	44	4
Suicides (963, 970-979).....	17	17	..
Homicides (964, 980-985).....	9	6	3

Table 3

Communicable Diseases Reported
Southeastern Health District, 1963

Disease	Total	White	Nonwhite
Total.....	1,249	842	407
Chickenpox.....	123	90	33
Diphtheria.....	..	..	..
German measles.....	41	33	8
Gonococcal infections.....	291	105	186
Measles.....	339	260	79
Meningococcal infections.....	5	5	..
Mumps.....	153	134	19
Poliomyelitis, paralytic cases.....	..	..	..
Scarlet fever.....	32	32	..
Syphilis.....	90	41	49
Tuberculosis, all forms.....	105	84	21
Typhoid fever.....	..	..	..
Whooping cough.....	6	5	1
All others.....	64	53	11

Table 1
Resident Births
Southern Health District, 1963

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	2,189	1,368	821
Hospital.....	2,147	1,353	794
Home.....	42	15	27
Private Physician.....	23	13	10
Midwife.....	3	0	3
Other.....	16	2	14

Table 2

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southern Health District, 1963

Cause of Death	Total	White	Nonwhite
All Causes.....	858	680	178
Tuberculosis, all forms (001-019).....	13	9	4
Respiratory tuberculosis (001-008).....	13	9	4
Syphilis (020-029).....	..	..	..
Dysentery (045-048).....	..	..	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	3	2	1
Acute poliomyelitis (080).....	..	..	..
Infectious hepatitis (092).....	2	1	1
Malignant neoplasms (140-205).....	138	106	32
Lymphatic and hematopoietic (200-205).....	11	9	2
Benign and unspecified neoplasms (210-239).. <td>2</td> <td>1</td> <td>1</td>	2	1	1
Diabetes (260).....	20	17	3
Anemias (290-293).....	2	2	..
Vascular lesions of the central nervous system (330-334).....	56	42	14

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southern Health District, 1963

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	328	287	41
Chronic rheumatic heart disease (410-416)	6	5	1
Arteriosclerotic and degenerative heart disease (420-422).....	270	242	28
Other diseases of the heart (430-434)....	8	7	1
Hypertensive heart disease (440-443).....	44	33	11
Other hypertensive diseases (444-447).....	4	2	2
Arteriosclerosis (450).....	10	9	1
Other diseases of the circulatory system (451-468).....	14	14	..
Influenza and pneumonia (480-483, 490-493).	34	26	8
Pneumonia (490-493).....	32	25	7
Bronchitis (500-502).....	10	8	2
Ulcer of the stomach and duodenum (540-541)	5	4	1
Appendicitis (550-553).....	2	1	1
Intestinal obstruction and hernia (560-570)	10	6	4
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	3	1	2
Cirrhosis of the liver (581).....	15	12	3
Nephritis and nephrosis (590-594).....	..	..	..
Hyperplasia of prostate (610).....	..	..	..
Puerperal causes (640-689).....	2	1	1
Congenital malformations (750-759).....	16	11	5
Certain diseases of early infancy (760-776)	23	11	12
Pneumonia of newborn (763).....	3	1	2
Senility, ill-defined and unknown conditions (780-795).....	1	..	1
All other diseases.....	65	45	20
Accidents, total (800-962, 965).....	60	47	13
Motor vehicle accidents (810-835).....	25	19	6
All other accidents.....	35	28	7
Suicides (963, 970-979).....	9	9	..
Homicides (964, 980-985).....	11	6	5

Table 3

Communicable Diseases Reported
Southern Health District, 1963

Disease	Total	White	Nonwhite
Total.....	537	210	327
Chickenpox.....	31	12	19
Diphtheria.....	..	..	..
German measles.....	1	..	1
Gonococcal infections.....	181	36	145
Measles.....	73	29	44
Meningococcal infections.....	1	..	1
Mumps.....	48	38	10
Poliomyelitis, paralytic cases.....	..	..	..
Scarlet fever.....	7	3	4
Syphilis.....	88	33	55
Tuberculosis, all forms.....	77	48	29
Typhoid fever.....	..	..	..
Whooping cough.....	..	..	..
All others.....	30	11	19



BALTIMORE CITY HEALTH DEPARTMENT BUREAU OF BIOSTATISTICS

QUARTERLY

STATISTICAL

REPORT

Maryland Department of Health
University of Maryland Library
College Park, Md.

MARRIAGES

BIRTHS

MORTALITY

MORBIDITY

THIRD QUARTER - 1964

FEBRUARY 1, 1965, Vol. 16, No. 3

BALTIMORE CITY HEALTH DEPARTMENT

Robert E. Farber, M.D.
Commissioner

BUREAU OF BIOSTATISTICS

Elizabeth B. Kelley, B.S.
Director

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation".

Quetelet

The Baltimore Quarterly Statistical Report is prepared by the Bureau of Biostatistics for the purpose of distributing to interested agencies and individuals, a quantitative and cumulative record of health conditions during the current year.

Table of Contents

	Page
A Summary of Vital Events	1 - 2
B Annual Rates by Month for Births and Selected Causes of Death	3
C Morbidity Rates by Month	4
D Average Morbidity Rates by Month	5
E Tables of Vital Events	6 - 9
I Marriages, Births, Deaths by Race	6
II Deaths From Selected Causes	7
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	8
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths, Tuberculosis Hospital Admissions and Patients Receiving Chemotherapy	9
F Population Estimate, Baltimore, Maryland - July 1, 1964	10 - 13



Vital Events - Baltimore, Maryland
July-September, 1964

Births

There were 5,864 resident births, 2,803 white and 3,061 nonwhite, recorded during the third quarter of 1964. This gives a total of 16,514 births for the period January-September, 1964, a decrease of 58 births from the 16,572 reported during the comparable period of 1963. The birth rate for the nine month period was 23.9 per 1,000 population, identical to the final birth rate for 1963. Among the white population the birth rate was 19.4 and among the nonwhite population 31.0. For the first time in the record of the city the number of nonwhite births slightly exceeded the number of white births during the first and third quarters of the year.

Mortality

There were 2,858 resident deaths during the third quarter of 1964 bringing the total for the first nine months of the year to 8,626. The resulting death rate for the period January-September was 12.5 per 1,000 population. This represents a 6 per cent decrease from the rate of 13.3 during the comparable period of 1963 but when compared with the average experience during the past three years shows little change. A large part of the variability in the death rate for all ages is due to outbreaks of influenza which affect chronic disease mortality as well as influenza and pneumonia deaths.

The infant mortality rate, which had shown a decrease during the first half of the year, was 34.6 per 1,000 live births during the third quarter compared to 27.3 during the third quarter of 1963 and an average of 30.8 for the comparable period of the last 3 years. The excess

infant mortality occurred primarily in the neonatal period and was attributable to certain diseases of early infancy as opposed to congenital malformations. During the period July-September three maternal deaths were recorded giving a maternal death rate of 5.1 per 10,000 births.

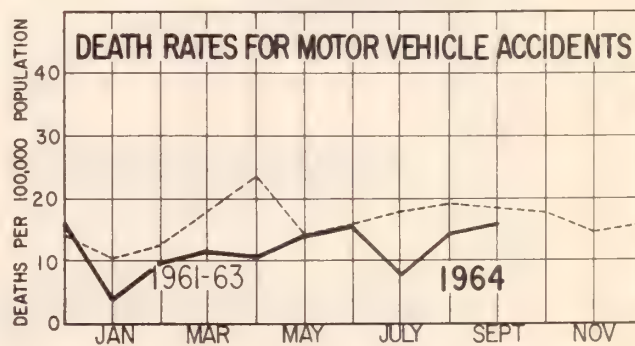
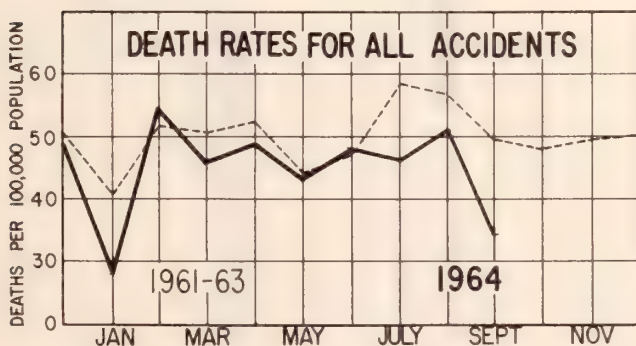
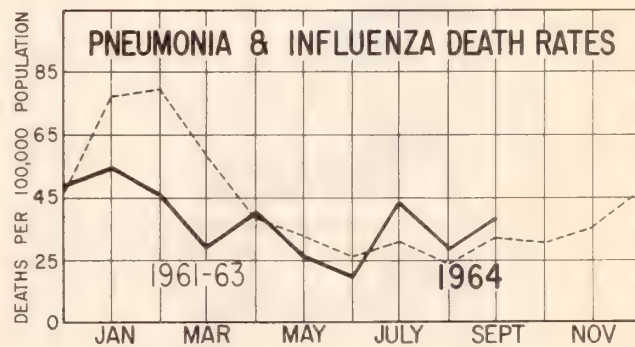
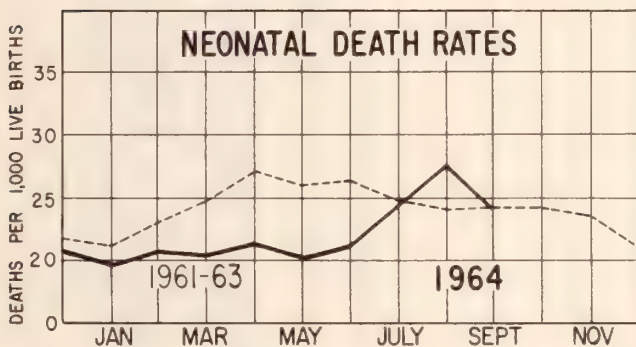
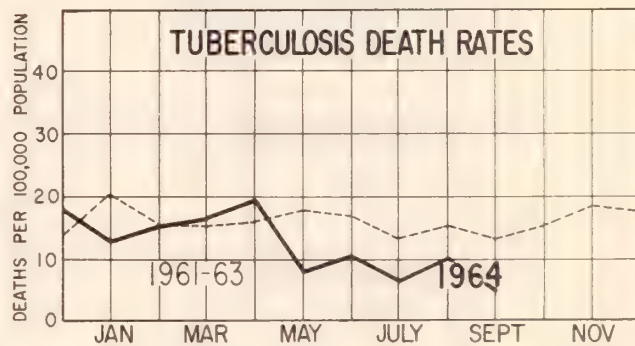
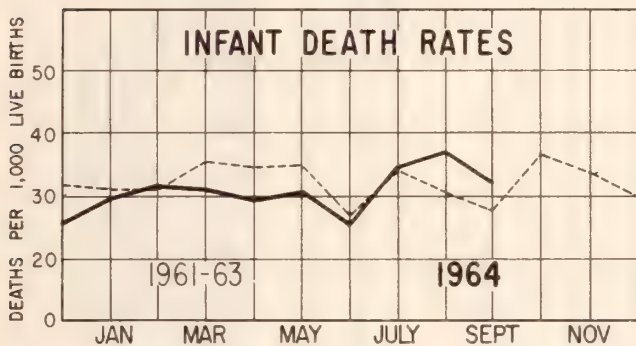
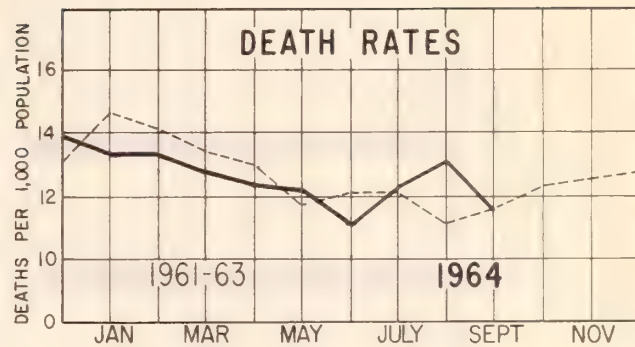
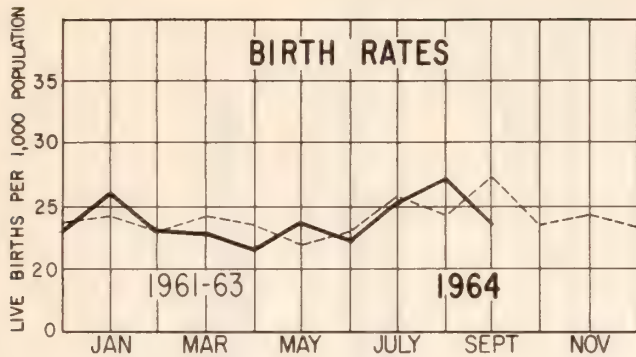
Among the specific causes of mortality - tuberculosis, influenza and pneumonia, and accidents showed significant declines for the first nine months of 1964 compared with the comparable period for 1961-1963. Counterbalancing these were increases in cancer, diabetes, and cirrhosis of the liver.

Morbidity

The city passed through its third summer without a single case of paralytic poliomyelitis being recorded. The last two reported cases occurred in 1961.

The outbreak of German measles which started the end of January and maintained high levels during March, April, and May had completely receded by the end of July.

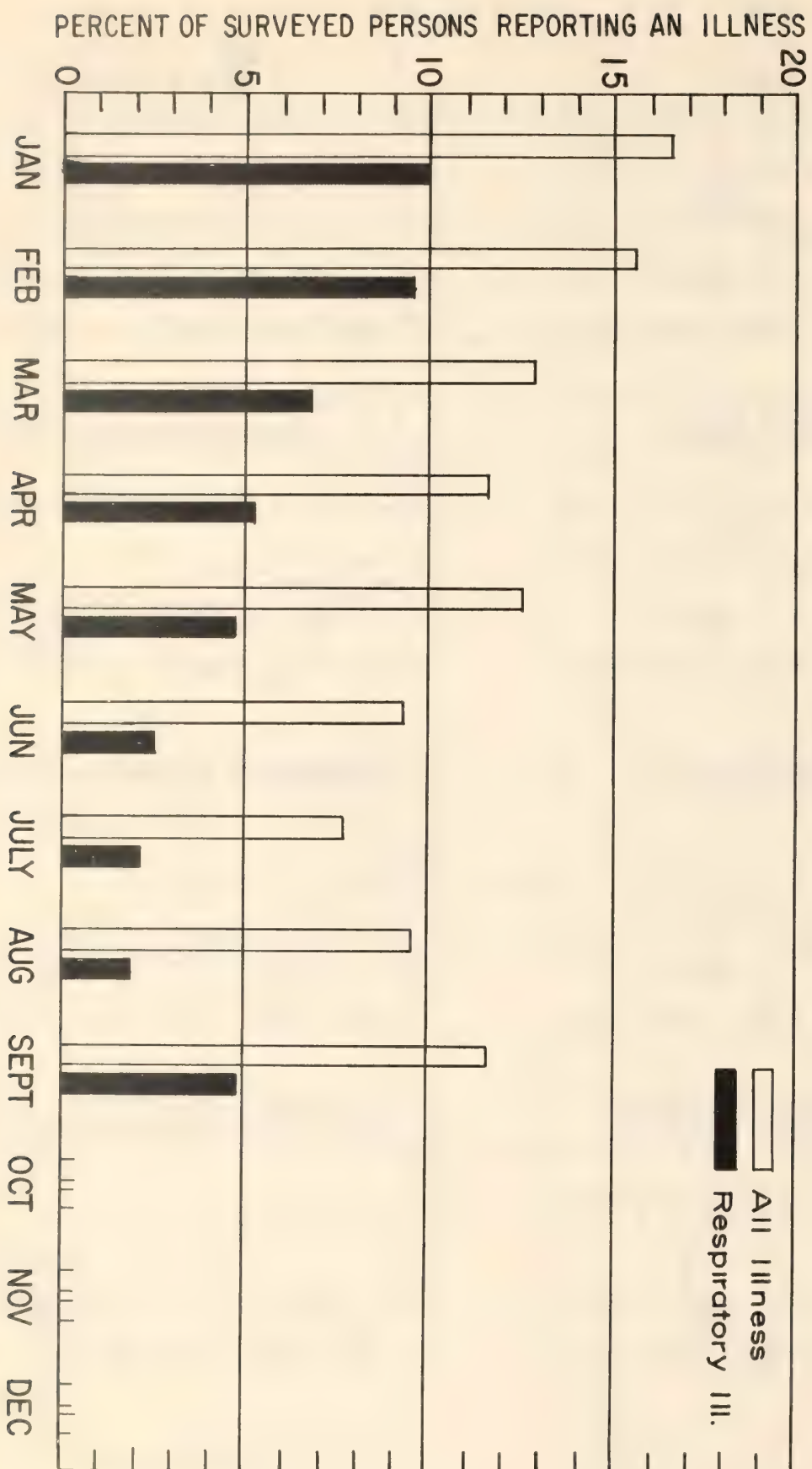
Information obtained from the Baltimore Health Survey showed that respiratory disease in the city followed normal seasonal patterns during the third quarter of 1964 although the respiratory illness rate during September was slightly higher than the average for the last three years.



BALTIMORE CITY HEALTH DEPARTMENT
BALTIMORE HEALTH SURVEY

MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

1964



BALTIMORE CITY HEALTH DEPARTMENT
BALTIMORE HEALTH SURVEY

MORBIDITY DUE TO ACUTE RESPIRATORY ILLNESS
AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

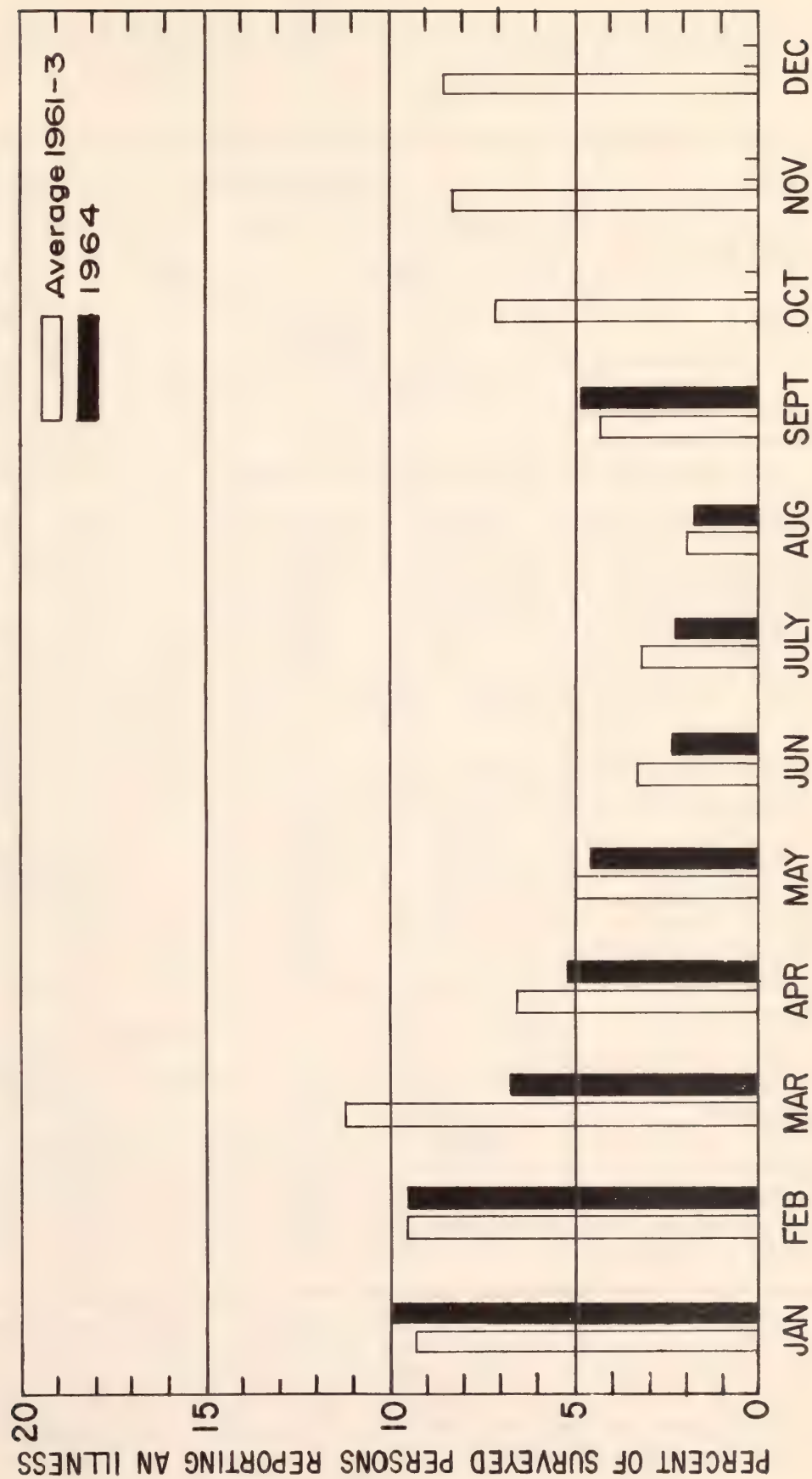


Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Third Quarter, 1964 and 1961-1963

Vital Event	JULY-SEPTEMBER				JANUARY-SEPTEMBER	
	Number		Rate*		Rate*	
	1964	Average 1961-63	1964	Average 1961-63	1964	Average 1961-63
	All Races					
Marriages Recorded.....	2,622	2,562	11.3	10.9	10.7	9.9
Births.....	5,864	6,078	25.3	25.9	23.9	24.2
Deaths, all causes.....	2,858	2,712	12.3	11.6	12.5	12.4
Deaths, under one year.....	203	187	34.6	30.8	31.3	31.5
under 28 days.....	162	148	27.6	24.4	23.2	24.3
28 days-11 months...	41	39	7.0	6.4	8.1	7.2
	White					
Marriages Recorded.....	1,656	1,640	11.8	11.1	11.4	10.2
Births.....	2,803	3,108	19.9	21.1	19.4	19.7
Deaths, all causes.....	1,913	1,855	13.6	12.6	13.9	13.4
Deaths, under one year.....	72	75	25.7	24.1	23.6	23.8
under 28 days.....	59	60	21.1	19.3	17.8	18.7
28 days-11 months...	13	15	4.6	4.8	5.8	5.1
	Nonwhite					
Marriages Recorded.....	966	922	10.6	10.6	9.6	9.5
Births.....	3,061	2,970	32.6	34.0	31.0	31.8
Deaths, all causes.....	945	857	9.4	9.8	10.3	10.4
Deaths, under one year.....	131	112	42.8	37.7	38.7	39.6
under 28 days.....	103	88	33.7	29.6	28.5	30.1
28 days-11 months...	28	24	9.1	8.1	10.2	9.5

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1964--total population 922,000; white 560,000; nonwhite 362,000. Population for period 1961-1963 was taken as the average mid year population for the three years as adjusted from the 1960 U. S. Census, i.e., total population 931,000; white 584,700; nonwhite 346,300.

Table II

Resident Deaths From Selected Causes
Third Quarter, 1964 and 1961-1963

Cause of Death	JULY-SEPTEMBER				JANUARY-SEPTEMBER	
	Number		Rate Per 100,000*		Rate Per 100,000*	
	1964	Average 1961-63	1964	Average 1961-63	1964	Average 1961-63
All Causes	2,858	2,712	12.3	11.6	12.5	12.4
Tuberculosis (001-019).....	13	33	5.6	14.1	11.0	15.9
Syphilis (020-029).....	15	5	6.5	2.1	6.4	3.7
Cancer (140-205).....	490	477	211.4	203.3	217.2	207.1
Diabetes mellitus (260).....	82	55	35.4	23.4	37.1	29.6
Vascular lesions of the central nervous system (330-334).....	195	206	88.9	87.8	85.2	91.6
Diseases of the heart (410-445)	1,179	1,103	508.7	470.0	523.3	535.2
Influenza and pneumonia (480-483, 490-493).....	86	69	37.1	29.4	36.7	43.5
Cirrhosis of liver (581).....	53	42	22.9	17.9	24.0	20.2
Nephritis and nephrosis (590-594).....	23	17	9.9	7.2	9.3	8.6
Puerperal causes (640-652, 670-689).....	3	3	1.3	1.3	1.2	1.0
Congenital malformations (750-759).....	36	36	15.5	15.3	13.5	14.5
Certain diseases of early infancy (760-776).....	135	128	58.3	54.5	46.9	51.6
Suicides (963, 970-979).....	22	27	9.5	11.5	10.4	10.2
Homicides (964, 980-999).....	29	32	12.5	13.6	11.2	11.8
Accidents (800-802, 810-835, 840-962).....	102	121	44.0	51.6	44.5	48.5
Motor vehicles (810-835).....	29	39	12.5	16.6	11.4	15.7

*Rates shown for all causes are per 1,000 population

Table III

CASES AND DEATHS FROM SELECTED CAUSES AND INFANT DEATHS BY HEALTH DISTRICTS
THIRD QUARTER 1964 AND 1961-1963 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Western		Druid		Southeastern		Southern	
	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963
Infant deaths	203	185	41	55	58	73	53	40	27	23	22	13
Tuberculosis all forms	Cases Deaths 203 17	192 29	53 2	63 10	57 5	39 6	44 4	51 4	23 2	22 5	13 2	17 3
Infectious hepatitis	Cases Deaths 37 -	36 1.2	12 0	13 0	5 0	8 0.3	6 1	7 0.3	7 0	5 0.3	5 0	3 0.3
Lead paint poisoning	Cases Deaths 30 0	22 1	12 0	10 0.7	12 0	5 0.3	5 0	5.7 0	0 0	1 0	1 0	0.3 0
Whooping cough	Cases Deaths 22 1	12 0	13 0	2.6 0	7 1	0.3 0	0 0	3.8 0	1 0	5 0	1 0	0.3 0
Meningococcal infections	Cases Deaths 0 1	2 0	0 1	1.4 0	0 0	0.3 0	0 0	0.3 0	0 0	0 0	0 0	0 0
Measles	Cases Deaths 29 0	180 0	12 0	78 0	7 0	22 0	7 0	27 0	0 0	37 0	3 0	15 0
Acute polio- myelitis (paralytic)	Cases Deaths 0 0	0.3 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0.3 0	0 0	0 0
Syn. lis	Cases Deaths 391 12	405 3	118 1	114 1	107 1	93 2	128 2	150 1	21 1	20 1	12 0	21 1

All figures corrected for residence within Maryland.

*Totals include some intransfers allocated to Baltimore City but not otherwise allocated to health districts.

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths, Tuberculosis Hospital Admissions
and Patients Receiving Chemotherapy
Third Quarter, 1964 and 1963

	JULY-SEPTEMBER		JANUARY-SEPTEMBER	
	TOTAL		TOTAL	
	1964	1963	1964	1963
Newly Reported Cases.....	203	191	555	617
White.....	79	81	230	245
Nonwhite.....	124	110	325	372
Reported After Death.....	12	15	32	37
Number of Readmissions.....	31	32	87	96
White.....	15	14	47	45
Nonwhite.....	16	18	40	51
Number of Tuberculosis Deaths.....	14	31	69	89
White.....	7	16	33	47
Nonwhite.....	7	15	36	42
Number of Patients Admitted to Tuberculosis Hospitals.....	149	152	476	523
Number of Patients on Chemotherapy.....			2,675	2,435
Started in current year.....			955	882
Started in prior years.....			1,720	1,553

Population Estimate-Baltimore, Maryland
July 1, 1964

The estimated July 1, 1964 population of Baltimore City is 922,269 with 560,539 white and 361,730 nonwhite residents. This represents a decrease of approximately 2,000 persons from the July 1, 1963 estimate of 924,311 persons. This decrease shows a substantial reduction from the loss of 7,000 persons experienced during the previous year. It is believed that this decline in the loss of residents from the city gives evidence of a leveling off of the city's population after significant annual declines since 1957. Although the population total shows little change, the significant shifts in racial distribution and geographical distribution experienced during the past decade are continuing to occur.

Population change is determined by the number of births, deaths, and persons moving to and from the city during the year. Births and deaths are counted from the birth and death certificates issued during the year, but the number of people moving to or out of the city cannot be counted directly. Estimates of the net movement during the year are made from data believed to be indicative of the actual changes taking place. The components used in determining the July 1, 1964 population are shown below.

Components of the 1964 Population Estimate

<u>Component</u>	<u>Total</u>	<u>White</u>	<u>Nonwhite</u>
Population - July 1, 1963	924,311	570,163	354,148
Births, July 1, 1963-June 30, 1964	22,041	11,093	10,948
Deaths, July 1, 1963-June 30, 1964	11,412	7,692	3,720
Estimated Net Migration	-12,671	-13,025	+ 354
Population - July 1, 1964	922,269	560,539	361,730

Table 1

Estimated Population by Age and Race
Baltimore - 1964

Age Group	Total	White	Nonwhite
All Ages	922,269	560,539	361,730
Under 5	104,797	51,237	53,560
5 - 9	92,386	47,016	45,370
10 - 14	83,635	44,151	39,484
15 - 19	73,503	42,443	31,060
20 - 24	54,776	31,753	23,023
25 - 29	49,302	27,946	21,356
30 - 34	51,551	28,579	22,972
35 - 39	58,700	34,527	24,173
40 - 44	61,851	38,484	23,367
45 - 49	58,722	38,797	19,925
50 - 54	54,444	37,803	16,641
55 - 59	47,500	34,481	13,019
60 - 64	41,602	31,082	10,520
65 - 69	33,376	26,498	6,878
70 - 74	25,712	20,907	4,805
75 - 79	16,599	13,687	2,912
80 - 84	9,130	7,559	1,571
85 and over	4,683	3,589	1,094

Table 2

Estimated Population of Baltimore by Age and Race
 July 1, 1961-July 1, 1964
 and
 Enumerated Population, April 1, 1960

	U. S. Census April 1, 1960	Estimated Population			
		July 1, 1961	July 1, 1962	July 1, 1963	July 1, 1964
Total - All Ages	939,024	935,896	932,202	924,311	922,269
Under 5	102,609	103,181	103,908	104,120	104,797
5 - 14	171,565	172,913	173,898	174,482	176,021
15 - 24	122,606	123,338	124,945	125,584	128,279
25 - 44	251,127	243,872	236,551	228,249	221,404
45 - 64	206,250	205,407	204,586	202,825	202,268
65 and over	84,867	87,185	88,314	89,051	89,500
White - All Ages	610,608	596,563	585,547	570,163	560,539
Under 5	54,897	53,396	52,895	51,839	51,237
5 - 14	98,047	96,095	94,473	92,351	91,167
15 - 24	78,289	76,300	75,622	73,867	74,196
25 - 44	158,073	150,522	143,830	135,994	129,536
45 - 64	151,590	149,040	146,929	143,958	142,163
65 and over	69,712	71,210	71,798	72,154	72,240
Nonwhite - All Ages	328,416	339,333	346,655	354,148	361,730
Under 5	47,712	49,785	51,013	52,281	53,560
5 - 14	73,518	76,818	79,425	82,131	84,854
15 - 24	44,317	47,038	49,323	51,717	54,083
25 - 44	93,054	93,350	92,721	92,255	91,868
45 - 64	54,660	56,367	57,657	58,867	60,105
65 and over	15,155	15,975	16,516	16,897	17,260

Table 3

Per Cent Distribution of Estimated Population of Baltimore by Age and Race
 July 1, 1961-July 1, 1964
 and
 Enumerated Population, April 1, 1960

	U. S. Census April 1, 1960	Estimated Population			
		July 1, 1961	July 1, 1962	July 1, 1963	July 1, 1964
Total - All Ages	100.0	100.0	100.0	100.0	100.0
Under 5	10.9	11.0	11.1	11.3	11.4
5 - 14	18.3	18.5	18.7	18.8	19.1
15 - 24	13.1	13.2	13.4	13.6	13.9
25 - 44	26.7	26.1	25.4	24.7	24.0
45 - 64	22.0	21.9	22.0	21.9	21.9
65 and over	9.0	9.3	9.4	9.7	9.7
White - All Ages	100.0	100.0	100.0	100.0	100.0
Under 5	9.0	9.0	9.0	9.1	9.1
5 - 14	16.1	16.1	16.1	16.2	16.3
15 - 24	12.8	12.8	12.9	13.0	13.1
25 - 44	25.9	25.2	24.6	23.9	23.1
45 - 64	24.8	25.0	25.1	25.2	25.4
65 and over	11.4	11.9	12.3	12.6	13.0
Nonwhite - All Ages	100.0	100.0	100.0	100.0	100.0
Under 5	14.5	14.7	14.7	14.8	14.8
5 - 14	22.4	22.6	22.9	23.2	23.5
15 - 24	13.5	13.9	14.2	14.6	15.0
25 - 44	28.3	27.5	26.8	26.0	25.4
45 - 64	16.7	16.6	16.6	16.6	16.6
65 and over	4.6	4.7	4.8	4.8	4.7

MARCH 12, 1965 Vol.16, No. 4

BALTIMORE CITY HEALTH DEPARTMENT

Robert E. Farber, M.D.
Commissioner

BUREAU OF BIOSTATISTICS

Elizabeth B. Kelley, B.S.
Director

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation".

Quetelet

The Baltimore Quarterly Statistical Report is prepared by the Bureau of Biostatistics for the purpose of distributing to interested agencies and individuals, a quantitative and cumulative record of health conditions during the current year.

Table of Contents

	Page
A Summary of Vital Events	1 - 6
B Annual Rates by Month for Births and Selected Causes of Death	7
C Morbidity Rates by Month	8
D Average Morbidity Rates by Month	9
E Tables of Vital Events	10 - 13
I Marriages, Births, Deaths by Race	10
II Deaths From Selected Causes	11
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	12
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths, Tuberculosis Hospital Admissions and Patients Receiving Chemotherapy	13



Baltimore's Health Record for 1964

Following a substantial loss in population in 1963, it appears as though the total for the city has stabilized somewhat. The number of city residents was estimated as 922,000 on July 1, 1964, a decline of 2,000 from the 1963 total of 924,000. Although only a small change is seen in the total population, there continue to be significant movements in the characteristics of the population. The white population dropped from 570,000 in 1963 to 560,000 in 1964 as a result of a net outmigration affecting primarily young parents and their children. The nonwhite residents increased by 8,000 to 362,000 largely as a result of natural growth, i.e. the difference between births and deaths. There is no longer a significant net immigration to this city from southern states, a pattern characteristic of the period 1942-1959.

The economic status of the residents of the City is difficult to assess. The number who require public assistance is an index of the segment who are clearly economically dependent. During 1964, there was a continuation of the steady increase in this group from 62,000 persons on January 1, 1964 to approximately 72,000 on December 31, 1964. To a large extent this increase is due to the growing numbers of mothers with two or more children who find themselves in destitute circumstances. This then becomes a matter of concern to all who are charged with protecting the health of mothers and children. Fortunately, new insight into the amelioration of this problem appears to be unfolding itself.

Maternal and Child Health

Nationwide, there is definite evidence of a decline in the birth rate. Data available for metropolitan Baltimore confirms this. The number of live births which occurred in Baltimore, including births to mothers who are residents of Baltimore County and the northern part of Anne Arundel County, was estimated at 36,302, no apparent change from 1963 in spite of the fact that the total population increases by about two per cent per year. So far as the city resident experience is concerned, there were 22,062 live births in 1964, about the same as 1963. For the first time in the history of the city, nonwhite births exceeded white births, a pattern which is expected to continue. The recent history in this respect is shown below.

Births by Race

<u>Year</u>	<u>Total</u>	<u>White</u>	<u>Nonwhite</u>	<u>Per Cent Nonwhite</u>
1964	22,062	10,757	11,305	51
1960	23,262	11,998	11,264	49
1950	21,382	14,168	7,214	34
1940	13,712	10,105	3,607	26

Infant Mortality

The loss of nonwhite infant lives during 1964, 38 deaths per 1,000 liveborn, about the same as in 1963, is not a satisfactory health performance in this day and age. The basic difficulty lies in a high prematurity rate among many nonwhite mothers, primarily among younger age women. Adequate nutrition and personal hygiene of the mother beginning early in pregnancy are necessary pre-requisites to a healthy newborn infant. These have been difficult objectives to achieve. Through the implementation of new and expanded maternity and infant care services including the use of social workers and health educators, it is hoped that measureable progress can be achieved within the coming year.

Tuberculosis

The struggle against tuberculosis in Baltimore City has proved to be a slow and sometimes disappointing experience. Indeed, from 1961 to 1963 the number of newly reported tuberculosis cases increased from 749 to 796 reversing a long prior history of decline. The number of newly reported cases in 1964 dropped to 703, equivalent to an incidence rate of 76 per 100,000 population. At the same time, the number of deaths attributed to tuberculosis fell from 129 to 98 or a death rate of 10.6 per 100,000 the lowest ever recorded in this city for this disease. There is every reason to believe that the current spread of infection is limited, confined principally, to what is commonly called the inner city. By and large, the cases newly appearing for care, are due to infection in prior years combined with a current decline in individual health resulting from acute respiratory disease, poor nutrition or physical insults brought on by alcoholism. In the light of the known epidemiology of tuberculosis in this city, it can be expected that tuberculosis will decline at a rate not exceeding an average of 5 to 7 per cent annually.

Motor Vehicle Accidents

Counter to the national trend, the estimated number of individuals killed in automobile accidents in Baltimore City declined during 1964. While the number of fatal accidents decreased, the number of persons injured in motor vehicle accidents surpassed all previous record peaks in Baltimore. This disturbing experience is primarily due to the continuing uptrend of motor vehicles colliding with other motor vehicles. Other types of accidents, such as the number of pedestrians involved in accidents, have remained relatively stable in recent years.

Motor vehicle injuries follow seasonal patterns and can be predicted with a reasonable degree of accuracy. For example, the number of injuries can be projected upwards from a low point in mid-winter, to a late spring peak, after which a relatively high incidence of accidents continues during the summer declining in the late autumn.

Recent yearly trends in automobile accidents in Baltimore City are shown in the accompanying table.

<u>Year</u>	<u>Accidents Reported</u>	<u>Persons Injured</u>	<u>Persons Killed</u>
1964 (Est.)	21,600 (+ 7%)	10,740 (+ 9%)	100 (- 14%)
1963	20,235	9,857	116
1962	18,736	8,854	106
1961	17,535	8,237	91
1960	18,292	8,257	110

Other Morbidity Notes

The extent of venereal disease in 1964 showed no change of significance as compared with 1963. The recent history of infectious syphilis is shown as follows:

<u>Year</u>	<u>Infectious Cases of Syphilis</u>	<u>Gonococcal Infections</u>
1960	269	6,179
1961	381	5,981
1962	384	4,972
1963	421	5,256
1964	410	5,534

In common with the problems of infant mortality and tuberculosis, venereal disease is highly concentrated in economically depressed areas.

Throughout the East Coast in early 1964, there was a substantial outbreak of German measles, known technically as rubella. Baltimore was

attacked by this disease, starting January 30 continuing in near epidemic incidence until July 2 a period during which a total of 1,183 cases was reported to the City Health Department. Because of the heavy under-reporting of this disease, it is reasonable to assume that the total number of individuals affected may have been as high as 10,000. The importance of German measles is that it is a disease of mild proportions to the individual involved, but in the instance of a mother during her first trimester of pregnancy German measles could damage the developing infant.

Influenza is a disease for which it is difficult to obtain accurate counts of the number of individuals attacked. Three sources of information are available. The number of cases reported to the Health Department through its reportable disease system is one; the City's unique continuous health survey is another; and the loss of lives ascribed to pneumonia and influenza is the third. In each case there was conclusive evidence in 1964 that influenza was at a low level of incidence. This was in contrast to 1963 when early in that year, extremely high levels of influenza were experienced which produced a loss of life well in excess of the expected deaths.

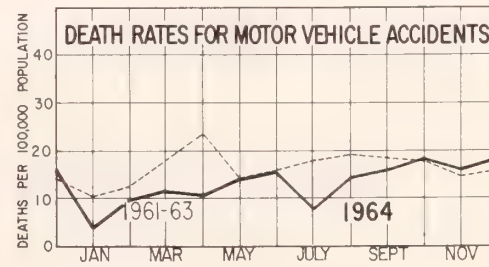
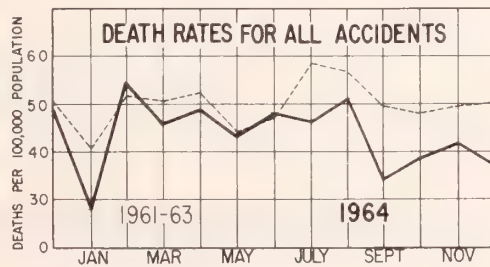
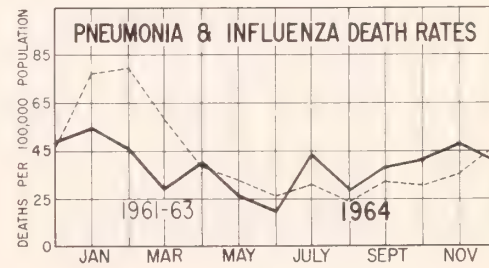
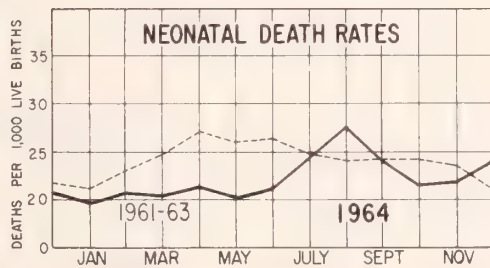
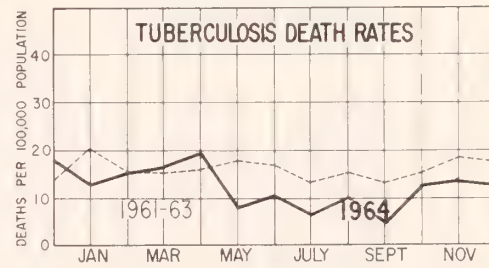
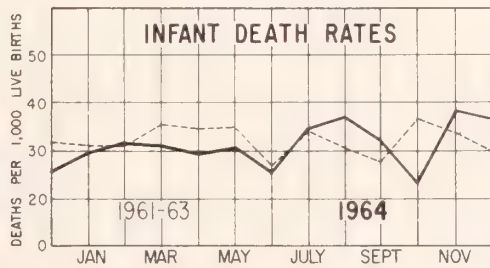
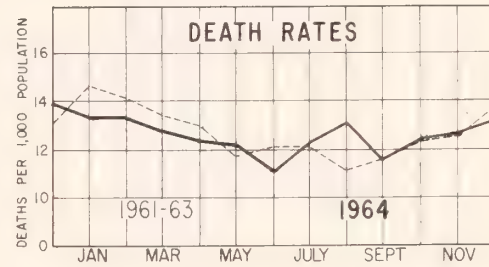
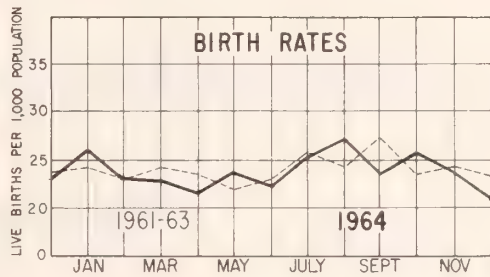
Principal Causes of Death

Diseases of the cardiovascular system, and cancer, all forms, account for 70 per cent of the total annual loss of life among Baltimore residents. Of major concern are the large number of lives lost, due to these causes, among persons less than 65 years of age. Rapidly developing knowledge on the cause of coronary heart disease, and on lung cancer, dramatic advances in drug therapy of hypertension, myocardial disease and some forms of cancer, and improvements in surgical treatment of vascular defects and cancer of the uterus all give promise of a reduction of loss of life in the range 45-64 years.

Conclusion

Many of the health problems of the City of Baltimore are socially and economically determined. These include infant mortality, illegitimacy, tuberculosis, and venereal disease. The persistent intervention of a limited staff of health workers produces only modest gains against these problems. Dramatic advances would result if the people themselves could strive to achieve improved levels of nutrition, personal hygiene and family stability. Such aspiration derives out of higher levels of formal education or out of long established cultural norms. The most rapid means for raising the desire of under-privileged people for improved health conditions must come through enriched educational opportunities, supported however by concrete material improvements in the immediate physical environment.

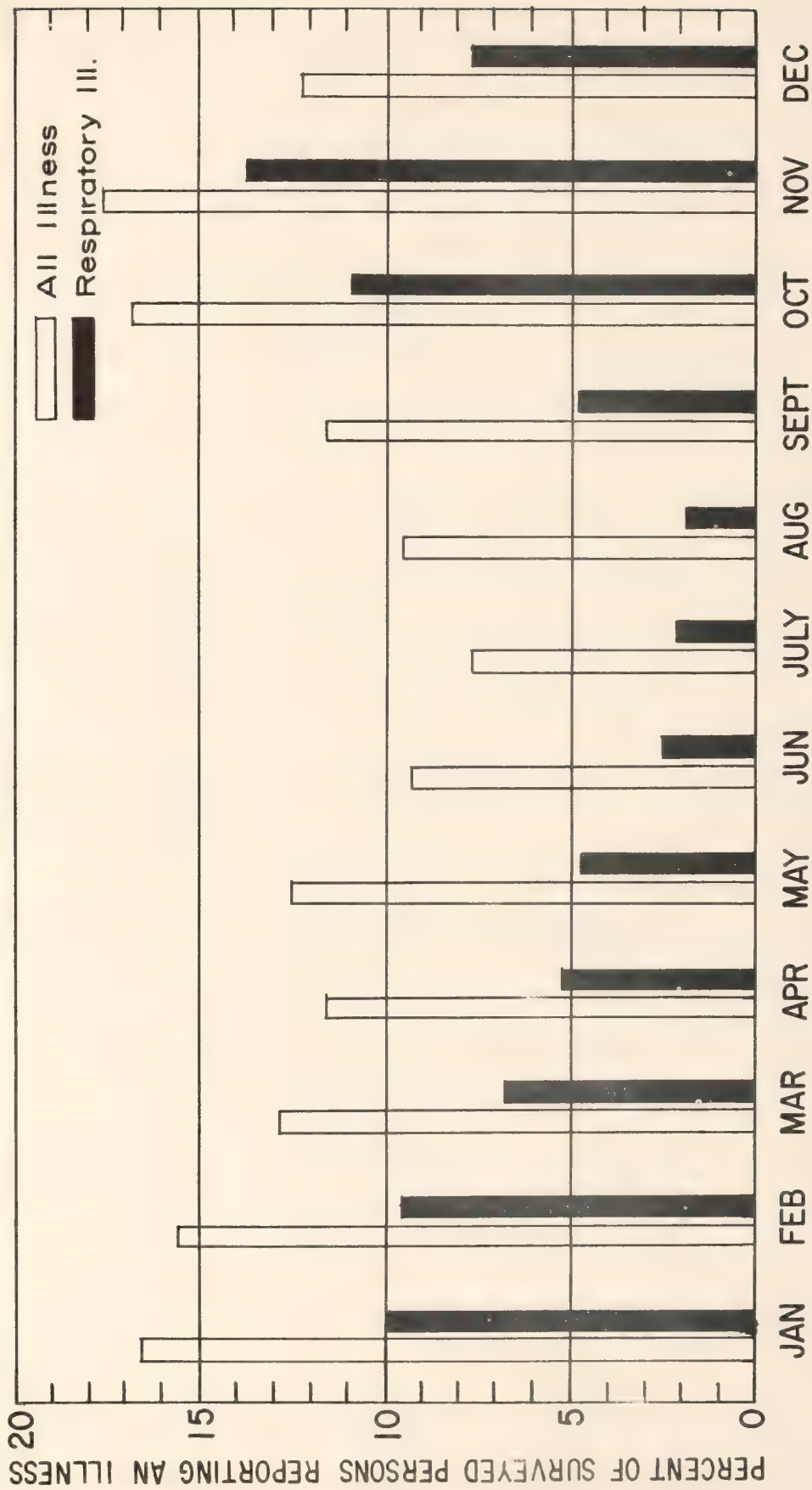
While preoccupied with health problems deriving out of economic deprivation it is important not to overlook the opportunities for promoting the health of large segments in the general population, particularly in the late adult ages. Specifically, efforts should and will be made to inform the adult population of the means which exist to protect themselves against lung cancer and cancer of the uterus. In cooperation with the several medical societies and voluntary health agencies, the resources for the reduction of disability and illness due to emotional disorders including alcoholism will be improved.



BALTIMORE CITY HEALTH DEPARTMENT
BALTIMORE HEALTH SURVEY

MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

1964



BALTIMORE CITY HEALTH DEPARTMENT
BALTIMORE HEALTH SURVEY

MORBIDITY DUE TO ACUTE RESPIRATORY ILLNESS
AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

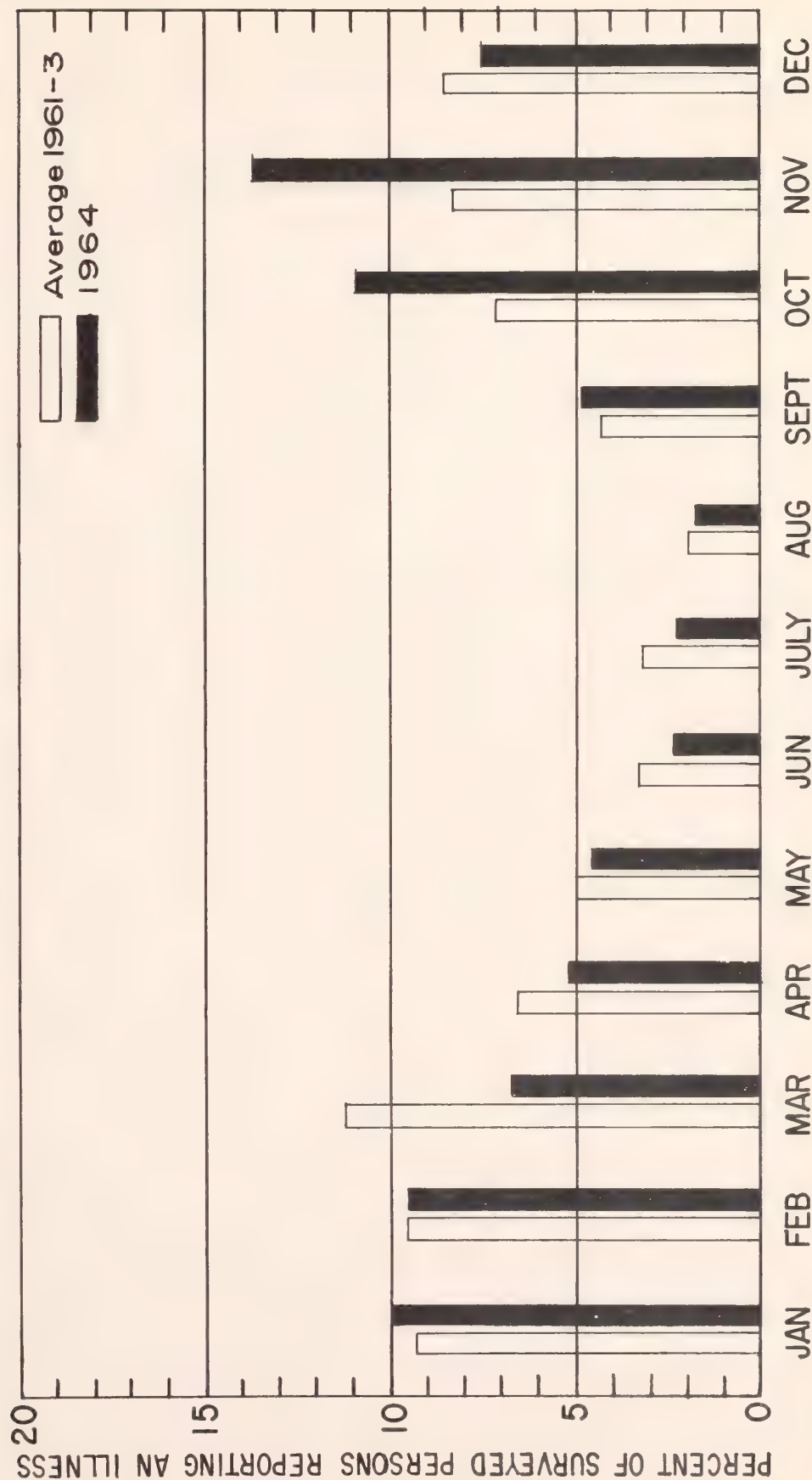


Table I

MARRIAGES RECORDED, RESIDENT BIRTHS, DEATHS AND INFANT DEATHS
AND CORRESPONDING RATES BY RACE: FOURTH QUARTER, 1964 AND 1961-1963

VITAL EVENT	OCTOBER-DECEMBER				JANUARY-DECEMBER	
	Number		Rate*		Rate*	
	1964	Average 1961-63	1964	Average 1961-63	1964	Average 1961-63
	All Races					
Marriages recorded.....	2,330	2,332	10.1	9.9	10.5	9.9
Births.....	5,415	5,553	23.4	23.7	23.8	24.1
Deaths, all causes.....	2,913	2,959	12.6	12.6	12.5	12.4
Deaths, under one year.....	178	186	32.9	33.5	31.7	32.0
under 28 days.....	122	131	22.5	23.6	23.1	24.1
28 days-11 months...	56	55	10.4	9.9	8.6	7.9
White						
Marriages recorded.....	1,469	1,472	10.4	10.0	11.1	10.1
Births.....	2,674	2,820	19.0	19.1	19.3	19.6
Deaths, all causes.....	1,935	2,022	13.7	13.7	13.9	13.5
Deaths, under one year.....	55	77	20.6	27.3	22.9	24.7
under 28 days.....	44	55	16.5	19.5	17.5	18.9
28 days-11 months...	11	22	4.1	7.8	5.4	5.8
Nonwhite						
Marriages recorded.....	861	860	9.5	9.9	9.6	9.6
Births.....	2,741	2,733	30.1	31.3	30.8	31.7
Deaths, all causes.....	978	937	10.7	10.7	10.4	10.5
Deaths, under one year.....	123	109	44.9	39.9	40.2	39.6
under 28 days.....	78	76	28.5	27.8	28.5	29.5
28 days-11 months...	45	33	16.4	12.1	11.7	10.1

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1964. Total, 922,000; White, 560,000; Nonwhite, 362,000.

TABLE 11

RESIDENT DEATHS FROM SELECTED CAUSES
FOURTH QUARTER, 1964 AND 1961-1963

CAUSE OF DEATH	OCTOBER-DECEMBER				JANUARY-DECEMBER	
	Number		Rate Per 100,000*		Rate Per 100,000*	
	1964	Average 1961-63	1964	Average 1961-63	1964	Average 1961-63
Causes.....	2,913	2,959	12.6	12.6	12.5	12.4
tuberculosis (001-019).....	50	40	12.9	17.0	11.5	16.2
leishmaniasis (020-029).....	8	7	3.5	3.0	4.6	3.5
scarlet fever (140-205).....	464	472	200.2	201.1	210.7	205.5
diabetes mellitus (260).....	75	66	32.4	28.1	35.9	29.2
vascular lesions of the central nervous system (330-331).....	227	211	97.9	89.9	88.4	91.3
diseases of the heart (410-443)	1,208	1,321	521.2	562.9	522.8	541.8
pneumonia and influenza						
80-483, 490-493).....	71	88	30.6	37.5	35.1	42.1
rhinopharyngitis of liver (531).....	6	47	26.8	20.0	24.7	20.3
nephritis and nephrosis						
90-594).....	28	22	12.1	9.4	10.0	8.7
peripheral causes (640-652, 660-689).....	2	2	0.8	0.9	1.1	0.9
genital malformations						
50-759).....	23	38	9.9	16.2	12.6	14.7
twin diseases of early infancy (760-776).....	108	115	46.6	49.0	46.9	50.7
leukemias (963, 970-979).....	24	23	10.4	9.8	10.4	10.1
lymphomas (984, 980-999).....	45	28	19.4	11.9	13.2	11.8
neoplasms (800-802, 810-835, 840-962).....	95	114	40.1	48.6	43.4	50.2
injuries by motor vehicles (810-835).....	40	37	17.3	15.8	12.9	16.1

*Rates shown for all causes are per 1,000 population.

TABLE III

CASES AND DEATHS FROM SELECTED CAUSES AND INFANT DEATHS BY HEALTH DISTRICTS
FOURTH QUARTER, 1964 AND 1961-1963 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Western		Druid		Southeastern		Southern	
	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963	1964	Average 1961-1963
Infant deaths	175	185	58	52	47	43	40	48	11	23	16	18
Tuberculosis, Cases	167	182	52	59	47	39	30	44	22	25	13	15
All forms Deaths	28	39	9	9	7	7	6	10	3	6	2	5
Syphilis Cases	383	413	100	97	84	110	160	135	14	32	16	32
Deaths	8	6	3	2.2	1	0.7	2	2.3	0	0.7	0	0
Infectious Cases	35	58	7	13.4	12	4.3	5	4	6	10	3	6.3
Hepatitis Deaths	2	0.7	1	0.7	1	0	0	0	0	0	0	0
Leishmaniasis Cases	0	7	4	3	1	2	1	1.7	0	0	0	0.3
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Whooping cough Cases	6	9	3	3.3	1	0.7	2	2	0	0	0	0
Deaths	0	0.3	0	0.3	0	0	0	0	0	0	0	0
Scarlet fever Cases	0	1	0	0.3	0	0	1	0	4	0.7	0	0
Deaths	2	1	0	0	0	0.7	0	0	2	0.3	0	0
Measles Cases	32	242	13	95	6	35	3	62	3	34	1	16
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Acute poliomyelitis (paralytic) Cases	0	0.3	0	0	0	0	0	0	0	0.3	0	0
Deaths	0	0	0	0	0	0	0	0	0	0	0	0

All figures corrected for residence within Maryland.

TABLE IV

NEWLY REPORTED AND REACTIVATED CASES OF TUBERCULOSIS,
TUBERCULOSIS DEATHS, TUBERCULOSIS HOSPITAL ADMISSIONS
AND PATIENTS RECEIVING CHEMOTHERAPY
FOURTH QUARTER, 1964 AND 1963

	OCTOBER-DECEMBER		JANUARY-DECEMBER	
	TOTAL		TOTAL	
	1964	1963	1964	1963
Newly Reported Cases.....	158	179	713	796
White.....	76	71	306	316
Nonwhite.....	82	108	407	480
Reported After Death.....	6	10	38	47
Number of Readmissions.....	19	19	106	115
White.....	9	12	56	57
Nonwhite.....	10	7	50	58
Number of Tuberculosis Deaths.....	22	25	91	114
White.....	11	11	44	58
Nonwhite.....	11	14	47	56
Number of Patients Admitted to Tuberculosis Hospitals.....	144	141	620	664
Discharged from Tuberculosis Hospitals.....	126	---	---	---
Number of Patients on Chemotherapy.....			2,678	2,556
Started in current year.....			1,147	1,107
Started in prior years.....			1,531	1,449





BALTIMORE CITY HEALTH DEPARTMENT
BUREAU OF BIOSTATISTICS

QUARTERLY

STATISTICAL

REPORT

BIRTHS

MARRIAGES

MORBIDITY

MORTALITY

FIRST & SECOND QUARTERS - 1965

VOL.17, Nos.1 & 2.

BALTIMORE CITY HEALTH DEPARTMENT

Robert E. Farber, M.D.
Commissioner

BUREAU OF BIOSTATISTICS

Elizabeth B. Kelley, B.S.
Director

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation".

Quetelet

The Baltimore Quarterly Statistical Report is prepared by the Bureau of Biostatistics for the purpose of distributing to interested agencies and individuals, a quantitative and cumulative record of health conditions during the current year.

TABLE OF CONTENTS

	Page
A Summary of Vital Events	1-4
B Tables of Vital Events	5-12
<u>FIRST QUARTER</u>	
I Marriages, Births, Deaths by Race	5
II Deaths From Selected Causes	6
III Cases and Deaths From Selected Causes and Infant Deaths by Health District	7
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths, Tuberculosis Hospital Admissions and Patients Receiving Chemotherapy	8
<u>SECOND QUARTER</u>	
I Marriages, Births, Deaths by Race	9
II Deaths From Selected Causes	10
III Cases and Deaths From Selected Causes and Infant Deaths by Health District	11
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths, Tuberculosis Hospital Admissions and Patients Receiving Chemotherapy	12
C Births, Deaths and Cases by Health Districts, 1964	13-27
D Births, Infant Deaths, Cases of Pulmonary Tuberculosis, and Cases of Syphilis by Census Tract: Each Health District	28-35

Vital Events - Baltimore, Maryland
January-June, 1965

Live Births

A total of 9,829 resident births were registered during the first six months of 1965--821 fewer than during the same period of 1964. This represents a 7.7 per cent decline in the number of births among Baltimore City residents compared to a 7.4 per cent decline for the United States during the same six month period. The total resident birth rate was 21.5 per 1,000 population, a 7.3 per cent drop from the rate of 23.2 experienced during the first six months of 1964.

The number of both white and nonwhite births decreased. During the first half of 1965, there were 4,766 white and 5,063 nonwhite births compared to 5,313 white and 5,337 nonwhite births in the same period of 1964. The white birth rate declined from 18.7 births per 1,000 white residents in 1964 to 17.2 in 1965, an 8.0 per cent decrease. The nonwhite birth rate, which had been 30.3 per 1,000 nonwhite residents for the first six months of 1964, was 28.2, a 6.9 per cent decrease.

Mortality

The total death rate for the first six months of 1965 was 13.0 per 1,000 persons, slightly higher than that for the comparable period of 1964 (12.6) but less than that for 1963 (13.8).

An increase was noted in the death rates for most of the leading causes of death with the exception of the death rate for

all accidents, which decreased approximately 12 per cent from 44.6 per 100,000 persons in 1964 to 39.4 per 100,000 persons in 1965. Unfortunately, this does not reflect a decrease in deaths due to motor vehicle accidents. The death rate for motor vehicle accidents increased from 10.7 per 100,000 persons in 1964 to 14.0 in 1965.

Although the specific death rates for diseases of the heart, vascular lesions of the central nervous system, influenza and pneumonia, and diseases of early infancy were higher in 1965 than in 1964, they all were well within the range experienced during the last five years. The death rates for diseases of early infancy and influenza and pneumonia were the lowest recorded during the January-June period in this decade with the exception of 1964.

The January-June death rate for cancer has increased at an average annual rate of 5 per cent since 1960 except in 1962, when there was a decline. During the first six months of 1965 the death rate for cancer was 228.1 per 100,000 persons, and cancer accounted for approximately 18 per cent of all deaths.

The death rate for diabetes continued its annual upward trend. During the first six months of 1965 there were 189 deaths due to diabetes giving a death rate of 41.3 per 100,000 persons.

Infant and Maternal Deaths

The infant mortality rate for the first six months of the year was 31.4 per 1,000 live births, a 6.4 per cent increase over the

rate for the comparable period of 1964 and the highest rate for this period since 1962. According to the Monthly Vital Statistics Report from the National Center for Health Statistics the infant mortality rate in the United States for the period January-May was about 4 per cent higher than the rate for the same period of 1964.

An increase in the white infant mortality rate was responsible for the higher total infant mortality rate. The white rate increased from 22.6 in 1964 to 29.8 in 1965 while the nonwhite rate decreased from 36.4 in 1964 to 33.0 in 1965. Both the neonatal and post-neonatal components of the white infant mortality rate showed an increase. The white neonatal mortality rate of 21.8 per 1,000 live births is the highest experienced among white births during the present decade, and the white post-neonatal rate of 8.0 is the highest since 1960.

Only one maternal death occurred during the first half of 1965 compared to 7 in 1964 and 4 in 1963.

Morbidity

The number of newly reported cases of tuberculosis increased from 352 in 1964 to 367 in 1965, a 4.3 per cent increase. Of these 367 cases, 272 or 74 per cent were active. There were 43 reactivated cases (readmissions) compared to 56 in 1964. The number of patients on chemotherapy as of June 30 increased by nearly 9 per cent from 2,573 in 1964 to 2,792 in 1965. At the end of the first half of 1965, there were 3,948 cases in the current tuberculosis register.

There were 13 cases of meningococcal infections resulting in 5 deaths during the first six months of 1965. The number of cases of measles dropped from 1,765 in 1964 to 571 in 1965, the lowest number reported in this decade. Cases of infectious hepatitis increased by 7 cases over 1964 with a total of 89 cases in 1965. There were 2 deaths due to infectious hepatitis. Reported cases of primary and secondary syphilis decreased from 181 in 1964 to 148 in 1965, an 18.2 per cent decrease.

A total of 16 cases of lead paint poisoning were reported compared to 9 during the first six months of 1964. All of the 16 cases were between the ages of 17-37 months.

Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: First Quarter, 1965 and 1962-1964

Vital Event	JANUARY-MARCH			
	Number		Rate*	
	1965	Average 1962-1964	1965	Average 1962-1964
	All Races			
Marriages recorded.....	2,108	1,984	9.3	8.7
Births.....	4,995	5,448	22.0	23.9
Deaths, all causes.....	3,091	3,158	13.6	13.8
Deaths, under one year.....	169	160	33.8	29.4
under 28 days.....	115	111	23.0	20.4
28 days-11 months....	54	49	10.8	9.0
White				
Marriages recorded.....	1,313	1,234	9.5	8.8
Births.....	2,411	2,710	17.5	19.2
Deaths, all causes.....	2,153	2,158	15.6	15.3
Deaths, under one year.....	72	62	29.9	22.9
under 28 days.....	47	45	19.5	16.6
28 days-11 months....	25	17	10.4	8.3
Nonwhite				
Marriages recorded.....	795	750	8.9	8.6
Births.....	2,584	2,738	28.9	31.3
Deaths, all causes.....	938	1,000	10.5	11.4
Deaths, under one year.....	97	98	37.5	35.8
under 28 days.....	68	66	26.3	24.1
28 days-11 months....	29	32	11.2	11.7

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1964--total population 922,000; white 560,000, nonwhite 362,000.

Table II

Resident Deaths From Selected Causes
First Quarter, 1965 and 1962-1964

Cause of Death	JANUARY-MARCH			
	Number		Rate Per 100,000*	
	1965	Average 1962-1964	1965	Average 1962-1964
All Causes	3,091	3,158	13.6	13.8
Tuberculosis (001-019)	26	37	11.4	16.2
Syphilis (020-029)	9	8	4.0	3.5
Cancer (140-205)	527	482	231.8	211.1
Diabetes mellitus (260)	87	90	38.3	39.4
Vascular lesions of the central nervous system (330-334)	219	224	96.3	98.1
Diseases of the heart (410-443)	1,320	1,435	580.3	628.5
Influenza and pneumonia (480-483, 490-493)	115	151	50.6	66.1
Cirrhosis of liver (581)	58	57	25.3	25.0
Nephritis and nephrosis (590-594)	24	20	10.6	8.8
Puerperal causes (640-652, 670-689)	0	3	0.0	1.3
Congenital malformations (750-759)	30	34	13.2	14.9
Certain diseases of early infancy (760-776)	106	100	46.6	43.3
Suicides (963, 970-979)	23	23	10.1	10.1
Homicides (964, 980-999)	21	23	9.2	10.1
Accidents (800-802, 810-835, 840-962)	87	108	38.3	47.3
Motor vehicles (810-835)	32	30	14.1	13.1

*Rates shown for all causes are per 1,000 population.

Table III

Cases and Deaths From Selected Causes and Infant Deaths by Health Districts
First Quarter 1965 and 1962-1964 Average

CAUSE OF ILLNESS AND DEATH	*TOTAL CITY		EASTERN		WESTERN		GRAND		SOUTHEASTERN		SOUTHERN	
	1965	Average 1962-1964	1965	Average 1962-1964	1965	Average 1962-1964	1965	Average 1962-1964	1965	Average 1962-1964	1965	Average 1962-1964
Infant deaths	169	134	43	44	40	42	50	56	12	19	13	17
Tuberculosis Cases	187	189	14	54	31	59	17	49	35	30	19	17
Deaths	24	36	8	9	4	9	5	6	4	7	2	3
Syphilis Cases	402	380	127	115	91	93	145	123	13	21	27	24
Deaths	3	7.6	0	2	1	1.6	4	2.3	1	0.7	0	0.7
Infectious hepatitis	48	32	19	13	1	4	9	5	15	7	4	3
Deaths	2	0.6	1	0.3	0	0.3	0	0	0	0	1	0
Lead paint poisoning	3	0.7	0	0.7	1	0	1	0	0	0	1	0
Cases	0	0	0	0	0	0	0	0	0	0	0	0
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Whooping cough	6	12	2	5	0	3	2	1.7	2	1.3	0	1
Cases	0	0.3	0	0	0	0	0	0	0	0.3	0	0
Deaths	0	0	0	0	0	0	0	0	0	0	0	0
Meningococcal Cases	4	4	1	2	2	1	0	0	0	1	1	0
Deaths	4	1	1	0	2	0.7	0	0	0	0.3	1	0
Measles Cases	235	718	150	224	26	163	25	135	28	126	4	67
Deaths	0	0.3	0	0	0	0	0	0.3	0	0	0	0
Acute polio-myelitis (paralytic)	0	0	0	0	0	0	0	0	0	0	0	0
Cases	0	0	0	0	0	0	0	0	0	0	0	0
Deaths	0	0	0	0	0	0	0	0	0	0	0	0

ALL FIGURES CORRECTED FOR RESIDENCE WITHIN MARYLAND

*TOTALS INCLUDE SOME INTRANSFERS LOCATED TO BALTIMORE CITY BUT NOT OTHERWISE ALLOCATED TO HEALTH DISTRICTS

Table IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths, Tuberculosis Hospital Admissions
and Patients Receiving Chemotherapy
First Quarter 1965 and 1964

	JANUARY-MARCH	
	TOTAL	
	1965	1964
Newly Reported Cases.....	160	142
White.....	67	61
Nonwhite.....	93	81
Reported After Death.....	4	14
Number of Readmissions *.....	29	26
White.....	14	14
Nonwhite.....	15	12
Number of Tuberculosis Deaths.....	30	28
White.....	22	15
Nonwhite.....	8	13
Number of Patients Admitted to Tuberculosis Hospitals.....	169	150
Number of Patients on Chemotherapy March 31..	2,683	2,559
Started in current quarter.....	289	257
Started in prior years.....	2,678	2,302
Taken off in current year.....	284	...

*Reactivated cases readmitted to current register

Table I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Second Quarter, 1965 and 1962-1964

Vital Event	APRIL-JUNE				JANUARY-JUNE	
	Number		Rate*		Rate*	
	1965	Average 1962-1964	1965	Average 1962-1964	1965	Average 1962-1964
	All Races					
Marriages recorded.....	2,800	2,548	12.2	11.0	10.7	9.9
Births.....	4,834	5,132	21.0	22.2	21.5	23.0
Deaths, all causes.....	2,863	2,762	12.5	12.0	13.0	12.9
Deaths, under one year.....	140	166	29.0	32.3	31.4	30.8
under 28 days.....	111	130	23.0	25.3	23.0	22.8
28 days-11 months..	29	36	6.0	7.0	8.4	8.0
White						
Marriages recorded.....	1,871	1,709	13.4	12.0	11.5	10.4
Births.....	2,355	2,633	16.9	18.5	17.2	18.8
Deaths, all causes.....	1,958	1,880	14.0	13.2	14.8	14.2
Deaths, under one year.....	70	61	29.7	23.2	29.8	23.0
under 28 days.....	57	48	24.2	18.2	21.8	17.4
28 days-11 months..	13	13	5.5	5.0	8.0	5.6
Nonwhite						
Marriages recorded.....	929	839	10.3	9.5	9.6	9.0
Births.....	2,479	2,499	27.5	28.3	28.2	29.8
Deaths, all causes.....	905	882	10.0	10.0	10.3	10.7
Deaths, under one year.....	70	105	28.2	42.0	33.0	38.8
under 28 days.....	54	82	21.8	32.8	24.1	28.3
28 days-11 months..	16	23	6.4	9.2	8.9	10.5

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1964--total population 922,000; white 560,000; nonwhite 362,000.

Table II

Resident Deaths From Selected Causes
Second Quarter, 1965 and 1962-1964

Cause of Death	APRIL-JUNE				JANUARY-JUNE	
	Number		Rate Per 100,000*		Rate Per 100,000	
	1965	Average 1962-1964	1965	Average 1962-1964	1965	Average 1962-1964
All Causes.....	2,863	2,762	12.5	12.0	13.0	13.1
Tuberculosis (001-019).....	32	34	13.9	14.7	12.7	15.7
Syphilis (020-029).....	10	13	4.4	5.6	4.2	4.6
Cancer (140-205).....	516	482	224.5	208.8	228.1	210.4
Diabetes mellitus (260).....	102	74	44.4	32.1	41.3	35.7
Vascular lesions of the central nervous system (330-334).....	204	195	88.7	84.5	92.5	91.2
Diseases of the heart (410-443).....	1,158	1,179	503.8	510.7	542.0	568.8
Influenza and pneumonia (480-483, 490-493).....	85	69	37.0	29.9	43.7	48.1
Cirrhosis of liver (581).....	72	47	31.3	20.4	28.4	22.9
Nephritis and nephrosis (590-594).....	11	21	4.8	9.1	7.7	8.7
Puerperal causes (640-652, 670-689).....	1	2	0.4	0.9	0.2	1.1
Congenital malformations (750-759).....	28	22	12.2	9.5	12.7	12.2
Certain diseases of early infancy (760-776).....	99	109	43.1	47.2	44.8	45.5
Suicides (963, 970-979).....	23	23	10.0	10.0	10.9	10.0
Homicides (964, 980-999).....	22	28	9.6	12.1	9.4	11.1
Accidents (800-802, 810-835, 840-962).....	93	111	40.5	48.1	39.4	47.5
Motor vehicles (810-835).....	32	39	13.9	16.9	14.0	15.0

*Rates shown for all causes are per 1,000 population

Table III

Cases and Deaths From Selected Causes, and Infant Deaths by Health Districts
Second Quarter 1965 and 1962-1964 Average

CAUSE OF ILLNESS AND DEATH	*TOTAL CITY		EASTERN		WESTERN		DRUID		SOUTHEASTERN		SOUTHERN	
	1965	Average 1962-1964	1965	Average 1962-1964	1965	Average 1962-1964	1965	Average 1962-1964	1965	Average 1962-1964	1965	Average 1962-1964
Infant deaths	140	133	53	51	38	43	31	38	16	17	15	12
Tuberculosis all forms	200 32	212 33	72 11	70 7	53 3	42 6	53 4	51 8	13 6	28 7	18 4	20 3
Syphilis	464 10	429 14	150 4	132 3.7	110 3	106 3.3	148 2	131 4.6	26 1	26 1.7	24 0	28 0.7
Infectious hepatitis	41 0	33 0.6	12 0	11 0	5 0	5 0	9 0	6 0.3	8 0	7 0.3	7 0	4 0
Lead paint poisoning	13 0	12 1.3	4 0	4 0	5 0	4 0.3	2 0	3 0.7	2 0	0.7 0.3	0 0	0.3 0
Whooping cough	3 0	6.3 0.3	1 0	1.3 0	1 0	0.7 0.3	1 0	2.3 0	0 0	2 0	0 0	0 0
Meningococcal infections	9 1	4.3 1	2 1	0.7 0.3	1 0	0.3 0	1 0	0.7 0	2 0	1.3 0.3	3 0	1.3 0.3
Measles	336 0	544 0	152 0	234 0	44 0	54 0	79 0	99 0	43 0	123 0	17 0	33 0
Acute polio myelitis (paralytic)	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

ALL FIGURES CORRECTED FOR RESIDENCE WITHIN MARYLAND

*TOTALS INCLUDE SOME INTRANSFERS ALLOCATED TO BALTIMORE CITY BUT NOT OTHERWISE APPLICATED TO HEALTH DISTRICTS

Table IV

**Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths, Tuberculosis Hospital Admissions
and Patients Receiving Chemotherapy
Second Quarter and Semi-Annual 1965 and 1964**

	APRIL-JUNE		JANUARY-JUNE	
	TOTAL		TOTAL	
	1965	1964	1965	1964
Newly Reported Cases.....	207	210	367	352
White.....	78	90	145	151
Nonwhite.....	129	120	222	201
Reported After Death.....	8	6	12	20
Number of Readmissions*.....	14	30	43	56
White.....	10	18	24	32
Nonwhite.....	4	12	19	24
Number of Tuberculosis Deaths.....	17	27	47	55
White.....	7	11	29	26
Nonwhite.....	10	16	18	29
Number of Patients Admitted to Tuberculosis Hospitals.....	153	177	322	327
Number of Patients on Chemotherapy				
June 30.....			2,792	2,573
Started in current quarter.....			341	563
Started in prior years.....			2,683	2,010
Taken off in current year..			232	...

*Reactivated cases readmitted to current register

Table 1
Resident Births
Eastern Health District, 1964

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	6,889	3,506	3,383
Hospital.....	6,818	3,495	3,323
Home.....	71	11	60
Private Physician.....	20	8	12
Midwife.....	13	1	12
Other.....	38	2	36

Table 2
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Eastern Health District, 1964

Cause of Death	Total	White	Nonwhite
All Causes.....	3,723	2,768	955
Tuberculosis, all forms (001-019).....	27	10	7
Respiratory tuberculosis (001-008).....	26	10	16
Syphilis (020-029).....	8	3	5
Dysentery (045-048).....	1	..	1
Meningococcal infections (057).....	1	1	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	5	3	2
Acute poliomyelitis (080).....	..	..	..
Encephalitis (082-083).....	1	1	..
Other infective and parasitic diseases (110-138).....	..	..	..
Malignant neoplasms (140-205).....	674	528	146
Lymphatic and hematopoietic (200-205).....	57	41	16
Benign and unspecified neoplasms (210-239).. <td>17</td> <td>15</td> <td>2</td>	17	15	2
Diabetes (260).....	84	61	23
Anemias (290-293).....	8	..	8
Other diseases of the blood and blood- forming organs (294-299).....	4	2	2
Vascular lesions of the central nervous system (330-334).....	306	238	68
Rheumatic fever (400-402).....	2	2	..

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Eastern Health District, 1964

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	1,576	1,269	307
Chronic rheumatic heart disease (410-416).....	43	35	8
Arteriosclerotic and degenerative heart disease (420-422).....	1,250	1,062	188
Other diseases of the heart (430-434).....	70	50	20
Hypertensive heart disease (440-443).....	213	122	91
Other hypertensive diseases (444-447).....	26	13	13
Arteriosclerosis (450).....	82	79	3
Other diseases of the circulatory system (451-458).....	67	50	15
Influenza and pneumonia (480-483, 490-493).....	106	70	36
Pneumonia (490-493).....	106	70	36
Bronchitis (500-502).....	46	11	5
Ulcer of the stomach and duodenum (540-541).....	23	21	2
Appendicitis (550-551).....	1	..	1
Intestinal obstruction and hernia (560-570).....	22	19	3
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	14	8	6
Cirrhosis of the liver (580).....	61	42	19
Nephritis and nephrosis (590-594).....	35	15	20
Hyperplasia of prostate (610).....	2	2	1
Puerperal causes (640-689).....	6	1	5
Congenital malformations (750-759).....	36	19	17
Certain diseases of early infancy (760-776).....	115	39	76
Pneumonia of newborn (763).....	8	3	5
Diarrhea of newborn (764).....	..	..	..
Senility, ill-defined and unknown conditions (780-795).....	8	6	2
All other diseases.....	203	126	77
Accidents, total (800-962, 965).....	119	76	43
Motor vehicle accidents (810-835).....	36	21	15
All other accidents.....	83	55	28
Suicides (963, 970-979).....	35	33	2
Homicides (964, 980-989).....	33	5	28

Table 3

Communicable Diseases Reported
Eastern Health District, 1964

Disease	Total	White	Nonwhite
Total.....	3,921	896	3,025
Chickenpox.....	154	97	57
Diphtheria.....	1	1	..
German measles.....	381	260	121
Gonococcal infections.....	1,874	91	1,783
Measles.....	497	126	371
Meningococcal infections.....	1	1	..
Mumps.....	173	133	40
Poliomyelitis, paralytic cases..	..	..	..
Scarlet fever.....	43	22	21
Syphilis.....	435	34	401
Tuberculosis, all forms.....	194	67	127
Typhoid fever.....	1	1	..
Whooping cough.....	21	9	12
All others.....	146	54	92

Table 1
Resident Births
Western Health District, 1964

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	4,818	1,692	3,126
Hospital.....	4,755	1,682	3,073
Home.....	63	10	53
Private Physician.....	32	8	24
Midwife.....	10	2	8
Other.....	21	..	21

Table 2
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Western Health District, 1964

Cause of Death	Total	White	Nonwhite
All Causes.....	2,330	1,217	1,113
Tuberculosis, all forms (001-019).....	29	13	16
Respiratory tuberculosis (001-008).....	27	13	14
Syphilis (020-029).....	11	2	9
Meningococcal infections (057).....	2	1	1
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074),.....	5	1	4
Encephalitis (082-083).....	1	..	1
Infectious hepatitis (092).....	2	1	1
Malignant neoplasms (140-205).....	368	206	162
Lymphatic and hematopoietic (200-205).....	19	11	8
Benign and unspecified neoplasms (210-239).. <td>11</td> <td>3</td> <td>8</td>	11	3	8
Diabetes (260).....	79	47	32
Anemias (290-293).....	4	..	4
Other diseases of the blood and blood- forming organs (294-299).....	2	1	1
Vascular lesions of the central nervous system (330-334).....	150	80	70
Rheumatic fever (400-402).....	2	..	2

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Western Health District, 1964

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	964	572	392
Chronic rheumatic heart disease (410-416).....	17	9	8
Arteriosclerotic and degenerative heart disease (420-422).....	732	489	243
Other diseases of the heart (430-434).....	34	18	16
Hypertensive heart disease (440-443).....	181	56	125
Other hypertensive diseases (444-447).....	20	5	15
Arteriosclerosis (450).....	28	15	13
Other diseases of the circulatory system (451-468).....	31	10	21
Influenza and pneumonia (480-483, 490-493).....	77	37	40
Pneumonia (490-493).....	76	36	40
Bronchitis (500-502).....	11	7	4
Ulcer of the stomach and duodenum (540-541).....	8	5	3
Appendicitis (550-553).....	3	2	1
Intestinal obstruction and hernia (560-570).....	9	4	5
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	6	1	5
Cirrhosis of the liver (581).....	44	23	21
Nephritis and nephrosis (590-594).....	22	7	15
Hyperplasia of prostate (610).....	3	2	1
Puerperal causes (640-689).....	3	..	3
Congenital malformations (750-759).....	25	8	17
Certain diseases of early infancy (760-776).....	127	36	91
Pneumonia of newborn (763).....	8	2	6
Diarrhea of newborn (764).....	..	..	..
Senility, ill-defined and unknown conditions (780-795).....	6	2	4
All other diseases.....	139	58	81
Accidents, total (800-962, 965).....	90	39	51
Motor vehicle accidents (810-835).....	35	10	25
All other accidents.....	55	29	26
Suicides (963, 970-979).....	19	16	3
Homicides (964, 980-985).....	29	5	24

Table 3

Communicable Diseases Reported
Western Health District, 1964

Disease	Total	White	Nonwhite
Total	2,520	426	2,094
Chickenpox.....	103	34	69
Diphtheria.....	..	..	..
German measles.....	156	65	91
Gonococcal infections.....	1,152	60	1,092
Measles.....	421	155	266
Meningococcal infections.....	3	2	1
Mumps.....	50	8	42
Poliomyelitis, paralytic cases..	..	..	..
Scarlet fever.....	10	5	5
Syphilis.....	364	13	351
Tuberculosis, all forms.....	183	66	117
Typhoid fever.....	..	..	..
Whooping cough.....	11	2	9
All others.....	67	16	51

Table 1
Resident Births
Druid Health District, 1964

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	4,786	1,306	3,480
Hospital.....	4,709	1,301	3,408
Home.....	77	5	72
Private Physician.....	33	3	30
Midwife.....	8	0	8
Other.....	36	2	34

Table 2
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Druid Health District, 1964

Cause of Death	Total	White	Nonwhite
All Causes.....	2,781	1,396	1,385
Tuberculosis, all forms (001-019).....	18	5	13
Respiratory tuberculosis (001-008).....	17	5	12
Syphilis (020-029).....	11	2	9
Meningococcal infections (057).....	..	..	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	4	1	3
Encephalitis (082-083).....	1	..	1
Infectious hepatitis (092).....	3	2	1
Other infective and parasitic diseases (110-138).....	..	..	..
Malignant neoplasms (140-205).....	445	256	189
Lymphatic and hematopoietic (200-205).....	33	25	8
Benign and unspecified neoplasms (210-239).. <td>15</td> <td>6</td> <td>9</td>	15	6	9
Diabetes (260).....	73	40	33
Anemias (290-293).....	9	3	6
Other diseases of the blood and blood- forming organs (294-299).....	2	2	..
Vascular lesions of the central nervous system (330-334).....	204	92	112
Rheumatic fever (400-402).....	1	..	1

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
 Druid Health District, 1964

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	1,216	706	510
Chronic rheumatic heart disease (410-416).....	24	12	12
Arteriosclerotic and degenerative heart disease (420-422).....	910	609	301
Other diseases of the heart (430-434).....	43	20	23
Hypertensive heart disease (440-443).....	239	65	174
Other hypertensive diseases (444-447).....	19	4	15
Arteriosclerosis (450).....	33	19	14
Other diseases of the circulatory system (451-468).....	47	22	25
Influenza and pneumonia (480-483, 490-493).....	88	41	47
Pneumonia (490-493).....	87	40	47
Bronchitis (500-502).....	9	4	5
Ulcer of the stomach and duodenum (540-541).....	7	2	5
Appendicitis (550-553).....	4	1	3
Intestinal obstruction and hernia (560-570).....	16	8	8
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	2	3	5
Cirrhosis of the liver (581).....	55	16	39
Nephritis and nephrosis (590-594).....	18	6	12
Hyperplasia of prostate (610).....	4	..	4
Puerperal causes (640-689).....	1	1	..
Congenital malformations (750-759).....	19	8	11
Certain diseases of early infancy (760-776).....	103	17	86
Pneumonia of newborn (763).....	2	3	3
Diarrhea of newborn (764).....	1	..	1
Senility, ill-defined and unknown conditions (780-783).....	7	5	2
All other diseases.....	170	68	102
Accidents, total (800-962, 965).....	101	31	70
Motor vehicle accidents (810-835).....	20	12	8
All other accidents.....	81	19	62
Suicides (963, 970-979).....	24	16	8
Homicides (984, 980-985).....	46	9	37

Table 3

Communicable Diseases Reported
Druid Health District, 1964

Disease	Total	White	Nonwhite
Total.....	3,544	468	3,076
Chickenpox.....	124	39	85
Diphtheria.....	..	..	..
German measles.....	299	172	127
Gonococcal infections.....	1,953	82	1,871
Measles.....	305	49	256
Meningococcal infections.....	2	1	1
Mumps.....	61	35	26
Poliomyelitis, paralytic cases..	..	..	..
Scarlet fever.....	12	6	6
Syphilis.....	541	26	515
Tuberculosis, all forms.....	164	36	128
Typhoid fever.....	..	..	..
Whooping cough.....	3	1	2
All others.....	80	21	59

Table 1
Resident Births
Southeastern Health District, 1964

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	3,312	2,915	397
Hospital.....	3,298	2,905	393
Home.....	14	10	4
Private Physician.....	5	4	1
Midwife.....	..	..	..
Other.....	9	6	3

Table 2
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southeastern Health District, 1964

Cause of Death	Total	White	Nonwhite
All Causes.....	1,708	1,589	119
Tuberculosis, all forms (001-019).....	13	10	3
Respiratory tuberculosis (001-008).....	13	10	3
Syphilis (020-029).....	5	5	..
Dysentery (045-048).....	1	..	1
Meningococcal infections (057).....	3	3	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	3	3	..
Encephalitis (082-083).....	1	1	..
Infectious hepatitis (092).....	1	1	..
Other infective and parasitic diseases (110-138).....	..	..	..
Malignant neoplasms (140-205).....	272	257	15
Lymphatic and hematopoietic (200-205).....	16	16	..
Benign and unspecified neoplasms (210-239).. <td>11</td> <td>11</td> <td>..</td>	11	11	..
Diabetes (260).....	72	71	1
Anemias (290-293).....	5	5	..
Other diseases of the blood and blood- forming organs (294-299).....	3	3	..
Vascular lesions of the central nervous system (330-334).....	102	92	10
Rheumatic fever (400-402).....	..	..	..

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southeastern Health District, 1964

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	726	687	39
Chronic rheumatic heart disease (410-416).....	22	20	2
Arteriosclerotic and degenerative heart disease (420-422).....	600	575	25
Other diseases of the heart (430-434).....	23	21	2
Hypertensive heart disease (440-443).....	81	71	10
Other hypertensive diseases (444-447).....	8	7	1
Arteriosclerosis (450).....	30	30	..
Other diseases of the circulatory system (451-468).....	29	28	1
Influenza and pneumonia (480-483, 490-493).....	62	56	6
Pneumonia (490-493).....	62	56	6
Bronchitis (500-502).....	8	8	..
Ulcer of the stomach and duodenum (540-541).....	12	11	1
Intestinal obstruction and hernia (560-570).....	8	8	..
Appendicitis (550-553).....	1	1	..
Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	4	4	..
Cirrhosis of the liver (581).....	43	40	3
Nephritis and nephrosis (590-594).....	11	11	..
Hyperplasia of prostate (610).....	1	1	..
Puerperal causes (640-689).....	1	1	..
Congenital malformations (750-759).....	12	11	1
Certain diseases of early infancy (760-776).....	48	38	10
Pneumonia of newborn (763).....	3	3	..
Diarrhea of newborn (764).....	..	..	..
Senility, ill-defined and unknown conditions (780-795).....	7	6	1
All other diseases.....	120	105	15
Accidents, total (800-962, 965).....	64	57	7
Motor vehicle accidents (810-835).....	18	16	2
All other accidents.....	46	41	5
Suicides (963, 970-979).....	9	8	1
Homicides (964, 980-985).....	12	9	3

Table 3

Communicable Diseases Reported
Southeastern Health District, 1964

Disease	Total	White	Nonwhite
Total.....	1,579	1,162	417
Chickenpox.....	130	123	7
Diphtheria.....	..	..	..
German measles.....	279	262	17
Gonococcal infections.....	336	105	231
Measles.....	415	336	79
Meningococcal infections.....	5	4	1
Mumps.....	113	107	6
Poliomyelitis, paralytic cases..	..	..	..
Scarlet fever.....	38	34	4
Syphilis.....	77	26	51
Tuberculosis, all forms.....	114	100	14
Typhoid fever.....	..	..	..
Whooping cough.....	16	16	..
All others.....	56	49	7

Table 1
Resident Births
Southern Health District, 1964

Place of Delivery and Attendant	Total	White	Nonwhite
All Births.....	2,164	1,366	798
Hospital.....	2,135	1,362	773
Home.....	29	4	25
Private Physician.....	18	2	16
Midwife.....	1	..	1
Other.....	10	2	8

Table 2
Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southern Health District, 1964

Cause of Death	Total	White	Nonwhite
All Causes.....	814	625	189
Tuberculosis, all forms (001-019).....	9	9	..
Respiratory tuberculosis (001-008).....	9	9	..
Syphilis (020-029).....	1	1	..
Dysentery (045-048).....	..	..	..
Other infective diseases of bacterial origin (030-039, 052-054, 058-064, 070-074).....	1	..	1
Acute poliomyelitis (080).....	..	..	..
Infectious hepatitis (092).....	..	..	..
Malignant neoplasms (140-205).....	139	110	29
Lymphatic and hematopoietic (200-205).....	10	9	1
Benign and unspecified neoplasms (210-239).. <td>3</td> <td>3</td> <td>..</td>	3	3	..
Diabetes (260).....	20	15	5
Anemias (290-293).....	..	..	..
Vascular lesions of the central nervous system (330-334).....	53	41	12

Table 2 (Continued)

Resident Deaths for Certain Causes and Groups of Causes Classified by Color
Southern Health District, 1964

Cause of Death	Total	White	Nonwhite
Diseases of the heart (410-443).....	316	265	51
Chronic rheumatic heart disease (410-416).. Arteriosclerotic and degenerative heart disease (420-422).....	5 264	4 226	1 38
Other diseases of the heart (430-434).....	7	5	2
Hypertensive heart disease (440-443).....	40	30	10
Other hypertensive diseases (444-447).....	1	1	..
Arteriosclerosis (450).....	10	8	2
Other diseases of the circulatory system (451-468).....	9	6	3
Influenza and pneumonia (480-483, 490-493)...	26	17	9
Pneumonia (490-493).....	26	17	9
Bronchitis (500-502).....	1	1	..
Ulcer of the stomach and duodenum (540-541).. Appendicitis (550-553).....	4 2	3 1	1 1
Intestinal obstruction and hernia (560-570).. Gastritis, duodenitis, enteritis and colitis (542, 543, 571, 572).....	6 2	4 1	2 1
Cirrhosis of the liver (581).....	27	23	4
Nephritis and nephrosis (590-594).....	5	3	2
Hyperplasia of prostate (610).....	..	..	..
Puerperal causes (640-689).....	1	1	..
Congenital malformations (750-759).....	15	10	5
Certain diseases of early infancy (760-776).. Pneumonia of newborn (763).....	37 2	17 2	20 ..
Diarrhea of newborn (764).....	..	..	..
Senility, ill-defined and unknown conditions (780-795).....	4	4	..
All other diseases.....	60	43	17
Accidents, total (800-962, 965).....	46	27	19
Motor vehicle accidents (810-835).....	15	8	7
All other accidents.....	31	19	12
Suicides (963, 970-979).....	12	10	2
Homicides (964, 980-985).....	4	1	3

Table 3

Communicable Diseases Reported
Southern Health District, 1964

Disease	Total	White	Nonwhite
Total.....	653	294	359
Chickenpox.....	48	33	15
Diphtheria.....	..	..	..
German measles.....	65	44	21
Gonococcal infections.....	178	41	137
Measles.....	191	93	98
Meningococcal infections.....	..	..	..
Mumps.....	21	10	11
Poliomyelitis, paralytic cases...	..	..	..
Scarlet fever.....	4	3	1
Syphilis.....	65	12	53
Tuberculosis, all forms.....	55	37	18
Typhoid fever.....	..	..	..
Whooping cough.....	3	3	..
All others.....	23	18	5

EASTERN HEALTH DISTRICT
1964

Census Tract	Live Births	Infant Deaths	Newly Reported Cases	
			Pulmonary Tuberculosis	Syphilis
Total	6,889	180	175	435
5-01	126	5	5	20
5-02	130	11	3	6
7-01	66	-	4	-
7-02	87	2	3	3
7-03	59	1	3	2
7-04	205	6	9	29
7-05	166	3	4	14
8-01	84	5	1	-
8-02	212	12	8	20
8-03	308	7	3	26
8-04	128	3	6	10
8-05	202	3	7	11
8-06	162	3	12	32
8-07	218	6	7	24
9-01	78	2	1	2
9-02	56	1	3	1
9-03	58	1	-	2
9-04	74	-	6	1
9-05	72	1	2	1
9-06	80	2	-	5
9-07	161	9	5	8
9-08	217	11	9	29
9-09	285	11	7	20
10-01	268	7	11	40
10-02	163	4	6	24
10-03	-	-	2	4

EASTERN HEALTH DISTRICT (CONTINUED)
1964

Census Tract	Live Births	Infant Deaths	Newly Reported Cases	
			Pulmonary Tuberculosis	Syphilis
12-01	23	-	2	1
12-02	88	2	2	6
12-03	150	2	4	8
12-04	165	2	7	38
12-05	148	7	4	11
12-06	66	1	2	4
12-07	107	5	3	3
13-05	142	3	1	1
13-06	72	5	2	2
13-07	76	1	3	-
27-01	136	1	2	2
27-02	44	-	2	4
27-03	84	3	1	2
27-04A	123	2	2	2
27-04B	80	-	2	1
27-05	206	2	1	-
27-06	105	3	-	1
27-07	208	5	-	2
27-08A	345	5	2	1
27-08B	250	3	1	-
27-09	203	3	1	2
27-10	209	6	2	9
27-11	40	-	1	-
27-12	58	3	-	1
27-13	40	-	1	-
27-14	56	-	-	-

WESTERN HEALTH DISTRICT
1964

Census Tract	Live Births	Infant Deaths	Newly Reported Cases	
			Pulmonary Tuberculosis	Syphilis
Total	4,818	185	173	364
4-02	146	7	7	20
15-06	192	10	8	29
15-07A	48	2	2	5
15-07B	108	4	3	14
15-08A	126	5	2	13
15-08B	55	1	1	8
15-09	141	3	2	7
16-05	95	1	5	10
16-06	152	3	7	9
16-07	188	6	9	21
16-08	289	14	3	10
18-01	117	13	9	19
18-02	175	10	14	29
18-03	111	2	12	6
19-01	172	10	6	19
19-02	167	7	11	18
19-03	121	4	3	5
19-04	163	5	7	6

WESTERN HEALTH DISTRICT (CONTINUED)
1964

Census Tract	Live Births	Infant Deaths	Newly Reported Cases	
			Pulmonary Tuberculosis	Syphilis
20-01	173	8	8	25
20-02	200	6	7	19
20-03	112	7	2	1
20-04	134	3	4	8
20-05	105	3	3	2
20-06	97	-	1	4
20-07	243	12	5	21
20-08	36	1	-	2
21-01	91	6	7	10
21-02	142	6	5	7
22-02	65	3	8	4
25-01A	230	10	3	1
25-01B	67	1	2	1
28-02	83	3	2	1
28-03	208	5	2	6
28-04	266	4	3	4

DRUID HEALTH DISTRICT
1964

Census Tract	Live Births	Infant Deaths	Newly Reported Cases	
			Pulmonary Tuberculosis	Syphilis
Total	4,786	164	157	541
11-01	50	1	2	4
11-02	68	-	5	13
11-03	28	1	3	7
11-04	60	-	3	5
13-01	114	5	7	14
13-02	285	7	5	39
13-03	149	5	8	30
13-04	95	5	2	19
13-08	142	4	4	6
14-01	136	9	4	28
14-02	184	8	14	33
14-03	203	10	11	48
15-01	224	9	8	23
15-02	146	3	1	25
15-03	105	3	4	20
15-04	145	10	3	22
15-05	58	-	-	6
15-10	142	8	3	4
15-11	192	3	2	11
15-12	178	5	2	9
15-13	131	5	2	6

DRUID HEALTH DISTRICT (CONTINUED)
1964

Census Tract	Live Births	Infant Deaths	Newly Reported Cases	
			Pulmonary Tuberculosis	Syphilis
16-01	150	4	4	32
16-02	159	3	4	20
16-03	133	4	2	22
16-04	145	7	4	18
17-01	107	8	7	20
17-02	181	13	19	27
17-03	157	7	7	12
27-15	131	1	2	-
27-16	149	7	4	5
27-17	98	1	2	4
27-18	165	1	4	2
27-19	51	2	1	1
27-20	131	2	1	1
28-01A	86	2	1	1
28-01B	108	1	2	5

SOUTHEASTERN HEALTH DISTRICT
1964

Census Tract	Live Births	Infant Deaths	Newly Reported Cases	
			Pulmonary Tuberculosis	Syphilis
Total	3,312	77	108	77
1-01	92	1	5	1
1-02	61	-	2	-
1-03	69	2	4	-
1-04	49	-	2	-
1-05	99	1	4	2
2-01	79	5	2	2
2-02	67	1	2	2
2-03	60	1	7	1
3-01	119	-	11	13
3-02	137	10	8	6
6-01	82	4	2	1
6-02	110	1	1	4
6-03	109	1	4	4
6-04	137	3	9	11
6-05	90	6	6	15
26-01	277	3	4	1
26-02	316	5	2	1
26-03	367	8	6	3
26-04A	257	6	5	4
26-04B	42	1	1	1
26-05	126	1	1	-
26-06A	251	8	5	1
26-06B	-	-	-	-
26-07	54	-	-	-
26-08	55	2	4	1
26-09	72	3	6	1
26-10	66	2	2	1
26-11	68	1	2	1
26-12	1	1	1	-

SOUTHERN HEALTH DISTRICT
1964

Census Tract	Live Births	Infant Deaths	Newly Reported Cases	
			Pulmonary Tuberculosis	Syphilis
Total	2,164	76	53	65
4-01	15	-	10	3
22-01	76	10	5	13
23-01	100	4	6	11
23-02	85	1	3	2
23-03	46	-	3	-
24-01	71	4	4	2
24-02	67	2	2	5
24-03	79	3	1	-
24-04	88	1	-	2
25-02A	490	20	5	10
25-02B	170	5	2	1
25-02C	87	3	1	-
25-03A	170	7	5	7
25-03B	56	2	-	-
25-04	317	4	3	2
25-05	187	3	1	2
25-06	60	7	2	5



BALTIMORE CITY HEALTH DEPARTMENT
BUREAU OF BIOSTATISTICS

DO NOT WRITE IN THESE SPACES
UNIVERSITY OF MARYLAND
COLLEGE PARK LIBRARY

QUARTERLY

STATISTICAL

REPORT

BIRTHS

MARRIAGES

MORBIDITY

MORTALITY

THIRD QUARTER 1965
VOL. 17, NO. 3

BALTIMORE CITY HEALTH DEPARTMENT

Robert E. Farber, M.D.
Commissioner

BUREAU OF BIOSTATISTICS

Elizabeth B. Kelley, B.S.
Director

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation".

Quetelet

The Baltimore Quarterly Statistical Report is prepared by the Bureau of Biostatistics for the purpose of distributing to interested agencies and individuals, a quantitative and cumulative record of health conditions during the current year.

Table of Contents

	Page
A Summary of Vital Events	1 - 3
B Annual Rates by Month for Births and Selected Causes of Death	4
C Morbidity Rates by Month	5
D Average Morbidity Rates by Month	6
E Tables of Vital Events	
I Marriages, Births, Deaths by Race	7
II Deaths From Selected Causes	8
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	9
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths, Tuberculosis Hospital Admissions and Patients Receiving Chemotherapy	10
F Population Estimate, Baltimore, Maryland - July 1, 1965	11 - 17



Vital Events - Baltimore, Maryland
July-September, 1965

BIRTHS

There were 5,184 resident births, 2,480 white and 2,704 nonwhite, recorded during the third quarter of 1965, bringing the year's cumulative total to 15,013--approximately 9 per cent below the total for January-September, 1964. During the first nine months of the year there were 870 fewer white resident births and 631 fewer nonwhite resident births recorded than during the same period of the previous year.

The total birth rate for the nine month period was 21.9 per 1,000 population compared to 23.9 for the same period of 1964. The white birth rate for this period declined from 19.4 in 1964 to 17.7 in 1965, almost a 9 per cent decrease, while the nonwhite birth rate dropped from 31.0 to 28.1, also approximately a 9 per cent decrease.

DEATHS

The total death rate for the third quarter of 1965 was 12.2 per 1,000 population, slightly less than for the same three month period of 1964. The 2,829 resident deaths reported brought the cumulative total for the year to 8,783, approximately 160 more than during the first nine months of 1964. The resulting cumulative death rate is 12.8 compared to 12.5 in 1964.

The death rate for heart disease, the leading cause of death, showed a 10 per cent decline from 508.7 deaths per 100,000 persons during the third quarter of 1964 to 457.7 during the third quarter of 1965.

This follows a national trend of lower mortality for hypertensive heart disease. On the other hand, the death rate for all forms of cancer, the second leading cause of death, increased by almost 6 per cent from 217.2 per 100,000 persons in 1964 to 229.5 in 1965.

Despite a decline in the total number of deaths due to accidental causes, motor vehicle accidents were responsible for 52 resident deaths during the three month period July-September, almost twice as many as during the same period of 1964 when 29 resident deaths resulted from motor vehicle accidents. The excess mortality occurred in the months of July and August among persons 15 years of age and over.

Infant mortality showed a substantial decline during the third quarter of the year bringing the cumulative infant mortality rate for the period January-September to 29.8 deaths per 1,000 live births, a 4.8 per cent decrease from the rate of 31.3 experienced during the first nine months of 1964.

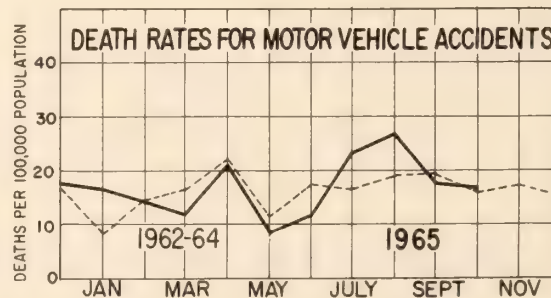
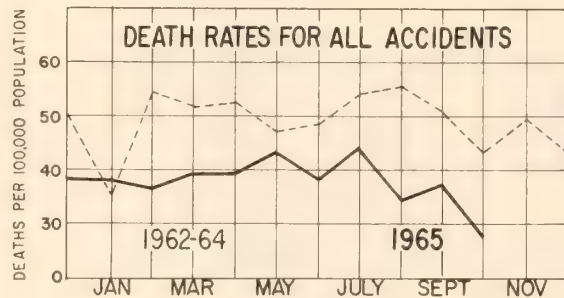
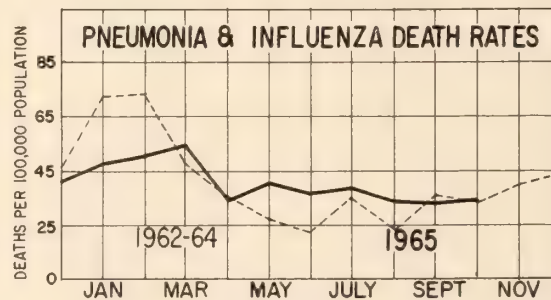
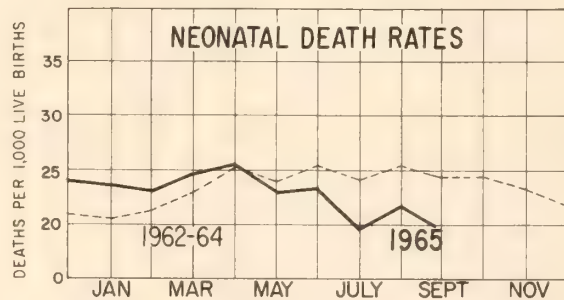
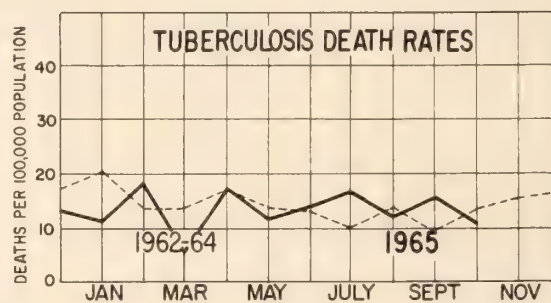
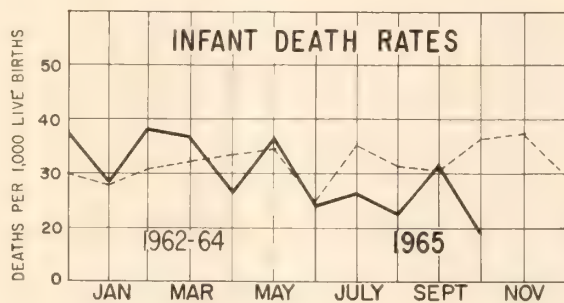
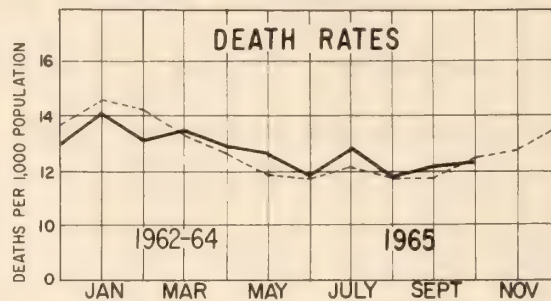
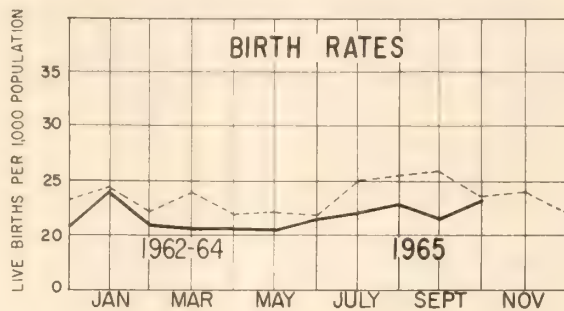
MORBIDITY

There were 200 new cases of tuberculosis, 183 of which were active, reported during the third quarter of 1965. This brings the total number of newly reported cases to 567 for the period January-September compared to 555 for this period in 1964. As of September 30, 1965 2,946 residents were receiving chemotherapy, approximately the same number as in the previous year.

The number of cases of salmonella infections reported during July-September reached a total of 49 in 1965 compared to 6 in 1964.

The Communicable Disease Center of the U. S. Department of Health, Education, and Welfare reported that an increasing seasonal incidence was to be expected at this time of the year.

Information gathered from the Baltimore Health Survey showed that respiratory disease in the city followed normal seasonal patterns during the third quarter of 1965.



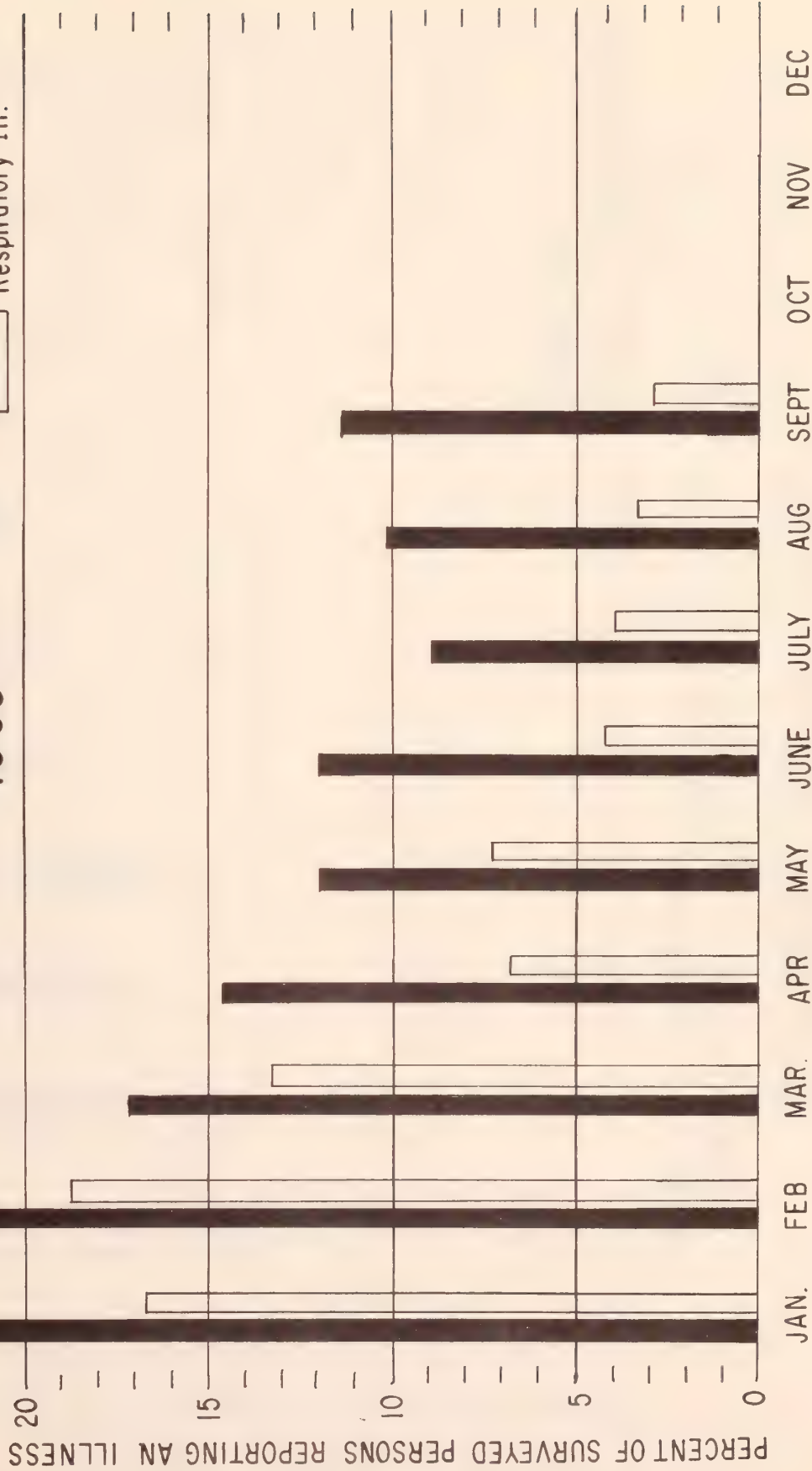
BALTIMORE CITY HEALTH DEPARTMENT

BALTIMORE HEALTH SURVEY

MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

1965

■ All Illness
□ Respiratory Ill.



BALTIMORE CITY HEALTH DEPARTMENT

BALTIMORE HEALTH SURVEY

MORBIDITY DUE TO ACUTE RESPIRATORY ILLNESS
AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

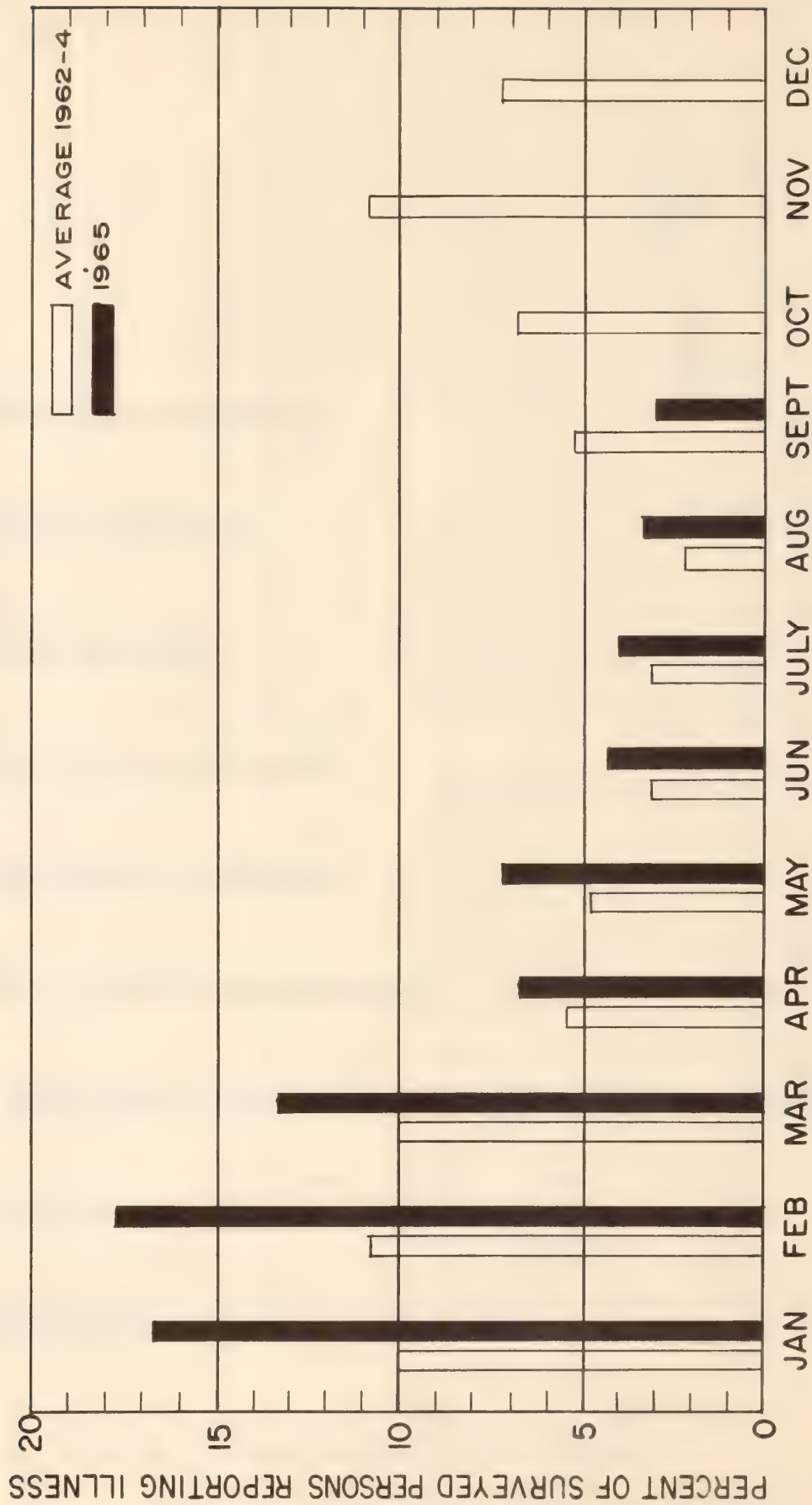


TABLE I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Third Quarter, 1965 and 1962-1964

Vital Event	JULY-SEPTEMBER				JANUARY-SEPTEMBER	
	Number		Rate*		Rate*	
	1965	Average 1962-64	1965	Average 1962-64	1965	Average 1962-64
	All Races					
Marriages recorded.....	2,888	2,619	12.5	11.2	11.4	10.3
Births.....	5,184	5,980	22.4	25.6	21.9	23.9
Deaths, all causes.....	2,829	2,732	12.2	11.7	12.8	12.5
Deaths, under one year.....	138	195	26.6	32.6	29.8	31.5
under 28 days.....	112	154	21.3	25.8	22.5	23.9
28 days-11 months.....	26	41	5.0	6.8	7.3	7.6
White						
Marriages recorded.....	1,787	1,650	12.9	11.5	12.1	10.7
Births.....	2,480	2,968	18.0	20.6	17.7	19.4
Deaths, all causes.....	1,878	1,843	13.6	12.8	14.6	13.8
Deaths, under one year.....	46	76	18.5	25.6	26.0	23.9
under 28 days.....	37	61	14.9	20.6	19.5	18.5
28 days-11 months.....	9	15	3.6	5.0	6.5	5.4
Nonwhite						
Marriages recorded.....	1,101	939	11.8	10.9	10.2	9.7
Births.....	2,704	3,012	29.0	33.7	28.1	31.1
Deaths, all causes.....	951	889	10.2	10.0	10.1	10.5
Deaths, under one year.....	92	119	34.0	39.5	33.4	39.0
under 28 days.....	75	93	27.7	30.9	25.4	29.2
28 days-11 months.....	17	26	6.3	8.6	8.0	9.8

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1965--total population 918,000; white 548,000; nonwhite 370,000. Population for period 1962-1964 was taken as the average mid year population for the three years as adjusted from the 1960 U. S. Census, i.e., total population 926,000; white 571,700; nonwhite 354,300.

TABLE II

Resident Deaths From Selected Causes
Third Quarter, 1965 and 1962-1964

Cause of Death	JULY-SEPTEMBER				JANUARY-SEPTEMBER	
	Number		Rate Per 100,000*		Rate Per 100,000*	
	1965	Average 1962-64	1965	Average 1962-64	1965	Average 1962-64
All Causes.....	2,826	2,761	12.2	11.8	12.8	12.6
Tuberculosis (001-019).....	33	25	14.3	10.7	13.0	13.9
Syphilis (020-029).....	4	7	1.7	3.0	3.3	4.3
Cancer (140-205).....	531	470	229.5	201.4	229.2	209.4
Diabetes mellitus (260).....	81	65	35.0	27.8	39.3	32.9
Vascular lesions of the central nervous system (330-334).....	197	198	85.1	84.8	90.3	88.9
Diseases of the heart (410-443)..	1,059	1,123	457.7	481.1	515.1	537.5
Influenza and pneumonia (480-483, 490-493).....	81	75	35.0	32.1	40.9	42.4
Cirrhosis of liver (581).....	66	45	28.5	19.3	28.5	21.7
Nephritis and nephrosis (590-594)	21	20	9.1	8.6	8.2	8.7
Puerperal causes (640-652, 670-689).....	3	3	1.3	1.3	0.6	1.0
Congenital malformations (750-759).....	28	39	12.1	16.7	12.5	13.7
Certain diseases of early infancy (760-776).....	96	130	41.5	55.7	43.8	48.9
Suicides (963, 970-979).....	22	25	9.5	10.7	10.5	10.3
Homicides (964, 980-999).....	45	36	19.4	15.4	12.8	12.6
Accidents (800-802, 810-835, 840-962).....	89	118	38.5	50.6	39.2	48.2
Motor vehicles (810-835).....	52	40	22.5	17.1	16.9	16.0

*Rates shown for all causes are per 1,000 population

TABLE III

Cases and Deaths From Selected Causes and Infant Deaths by Health Districts
Third Quarter 1935 and 1932-1934 Average

Cause of Illness and Death	*Total City		Eastern		Western		District		Southeastern		Southern	
	1935	Average 1932-1934	1935	Average 1935-1934	1935	Average 1932-1934	1935	Average 1932-1934	1935	Average 1932-1934	1935	Average 1932-1934
Infant deaths	138	193	32	51	57	43	27	43	18	24	19	17
Tuberculosis all forms	200 33	192 22	52 8	29 7	30 8	40 6	64 11	20 3	51 4	24 4	20 2	17 3
Infectious hepatitis	37 3	37 1.3	9 0	13 0	12 1	7 0.3	8 1	7 0.7	1 0	7 0.3	2 1	3 0
Lead paint poisoning	9 0	23 0.7	2 0	10 0.7	2 0	8 0	4 0	4 0	1 0	0.3 0	0 0	0.7 0
Whooping cough	10 0	11 0.3	1 0	5 0	2 0	2.3 0.3	7 0	0.7 0	0 0	2.7 0	0 0	0.3 0
Meningococcal infections	4 1	0.7 0	0 0	0.7 0	1 0	0 0	0 0	0 0	0 0	0 0	3 1	0 0
Measles	130 0	124 0	42 0	55 0	31 0	14 0	38 0	17 0	8 0	27 0	10 0	10.3 0
Syphilis	451 4	424 8	117 1	117 2	103 2	103 3.3	158 1	153 1	36 0	22 0.3	29 0	20 1
Acute polio- myelitis (paralytic)	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

All figures corrected for residence within Maryland.

*Totals include some intranfers allocated to Baltimore City but not otherwise allocated to health districts.

TABLE IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths, Tuberculosis Hospital Admissions
and Patients Receiving Chemotherapy
Third Quarter, 1965 and 1964

	JULY-SEPTEMBER		JANUARY-SEPTEMBER	
	TOTAL		TOTAL	
	1965	1964	1965	1964
Newly Reported Cases.....	200	203	567	555
White.....	83	79	228	230
Nonwhite.....	117	124	339	325
Reported After Death.....	15	12	27	32
Number of Readmissions.....	22	31	65	87
White.....	15	15	39	47
Nonwhite.....	7	16	26	40
Number of Tuberculosis Deaths.....	42	14	89	69
White.....	19	7	48	33
Nonwhite.....	23	7	41	36
Number of Patients Admitted to Tuberculosis Hospitals.....	133	149	455	476
Number of Patients on Chemotherapy.			2,677	2,675

Population Estimate-Baltimore, Maryland
July 1, 1965

The estimated July 1, 1965 population of Baltimore City is 917,752 with 548,093 white and 369,659 nonwhite residents. This represents a decrease of approximately 4,500 persons from the July 1, 1964 estimated population of 922,269. Table 1 shows the estimated 1965 population by age group and race.

Since the 1960 census of the population, the city has lost an average of 4,000 to 5,000 residents per year. The white population has declined by approximately 10 per cent while the nonwhite population has increased by 12 per cent and now constitutes 40 per cent of the total population. A sizeable continuous out-migration of white residents has been responsible for the decline in the white population, but migration has had a minimal effect on the nonwhite population since the late 1950's. During the last five years the increase in the nonwhite population has been primarily due to an excess of births over deaths which has averaged between 7,000 and 8,000 per year.

Population change is determined by the number of births, deaths, and persons moving to and from the city during the year. Births and deaths are counted from the birth and death certificates issued during the year. Estimates of net migration are not so easily obtained but are developed from data believed to be indicative of the actual changes taking place. The components used in determining the July 1, 1965 population estimate are shown below.

Components of the 1965 Population Estimate

	<u>Total</u>	<u>White</u>	<u>Nonwhite</u>
Estimated population, July 1, 1964	922,269	560,539	361,730
Births, July 1, 1964-June 30, 1965	21,083	10,262	10,821
Deaths, July 1, 1964-June 30, 1965	11,550	7,790	3,760
Estimated net migration	-14,050	-14,918	868
Estimated population, July 1, 1965	917,752	548,093	369,659

Population Estimates by Census Tract - July 1, 1965

Population estimates for census tracts are undoubtedly the most difficult and the least objective of the estimates presented in this report. These estimates are based on **records** of building permits and demolitions which do not reflect possible changes in density patterns or vacancy rates. An independent check on the direction of the estimated changes by census tract is obtained from the records of public school enrollment by census tract. A final correction is made so that the total population of all census tracts equals the current estimate of the city's population.

TABLE 1

Estimated Population by Age and Race
Baltimore City - July 1, 1965

Age Group	Total	White	Nonwhite
All Ages	217,752	548,093	369,659
Under 5	102,182	48,945	53,237
5 - 9	94,942	46,876	48,066
10 - 14	84,116	42,927	41,189
15 - 19	75,716	42,736	32,980
20 - 24	55,012	31,431	23,581
25 - 29	47,445	26,395	21,050
30 - 34	49,190	26,544	22,646
35 - 39	56,441	32,365	24,076
40 - 44	61,422	37,497	23,925
45 - 49	58,279	37,994	20,285
50 - 54	54,666	37,507	17,159
55 - 59	47,213	34,131	13,082
60 - 64	41,651	30,715	10,936
65 - 69	33,084	26,267	6,817
70 - 74	25,968	21,032	4,936
75 - 79	16,753	13,788	2,965
80 - 84	9,008	7,389	1,619
85 and over	4,664	3,554	1,110

TABLE 2

Estimated Population of Baltimore by Age and Race
 July 1, 1961-July 1, 1965
 and
 Enumerated Population, April 1, 1960

	U. S. Census April 1, 1960	Estimated Population				
		July 1, 1961	July 1, 1962	July 1, 1963	July 1, 1964	July 1, 1965
Total - All Ages	939,024	935,896	932,202	924,311	922,269	917,752
Under 5	102,609	103,181	103,908	104,120	104,797	102,182
5 - 14	171,565	172,913	173,898	174,482	176,021	179,058
15 - 24	122,606	123,338	124,945	125,584	128,279	130,728
25 - 44	251,127	243,872	236,551	228,249	221,404	214,498
45 - 64	206,250	205,407	204,586	202,825	202,268	201,809
65 and over	84,867	87,185	88,314	89,051	89,500	89,477
White - All Ages	610,608	596,563	585,547	570,163	560,539	548,093
Under 5	54,897	53,396	52,895	51,839	51,237	48,945
5 - 14	98,047	96,095	94,473	92,351	91,167	89,803
15 - 24	78,289	76,300	75,622	73,867	74,196	74,167
25 - 44	158,073	150,522	143,830	135,994	129,536	122,801
45 - 64	151,590	149,040	146,929	143,958	142,163	140,347
65 and over	69,712	71,210	71,798	72,154	72,240	72,030
Nonwhite - All Ages	328,416	339,333	346,655	354,148	361,730	369,659
Under 5	47,712	49,785	51,013	52,281	53,560	53,237
5 - 14	73,518	76,818	79,425	82,131	84,854	89,255
15 - 24	44,317	47,038	49,323	51,717	54,083	56,561
25 - 44	93,054	93,350	92,721	92,255	91,868	91,697
45 - 64	54,660	56,367	57,657	58,867	60,105	61,462
65 and over	15,155	15,975	16,516	16,897	17,260	17,447

TABLE 3

Per Cent Distribution of Estimated Population of Baltimore by Age and Race
 July 1, 1961-July 1, 1965
 and
 Enumerated Population, April 1, 1960

	U. S. Census April 1, 1960	Estimated Population				
		July 1, 1961	July 1, 1962	July 1, 1963	July 1, 1964	July 1, 1965
Total - All Ages	100.0	100.0	100.0	100.0	100.0	100.0
Under 5	10.9	11.0	11.1	11.3	11.4	11.1
5 - 14	18.3	18.5	18.7	18.8	19.1	19.5
15 - 24	13.1	13.2	13.4	13.6	13.9	14.3
25 - 44	26.7	26.1	25.4	24.7	24.0	23.4
45 - 64	22.0	21.9	22.0	21.9	21.9	22.0
65 and over	9.0	9.3	9.4	9.7	9.7	9.7
White - All Ages	100.0	100.0	100.0	100.0	100.0	100.0
Under 5	9.0	9.0	9.0	9.1	9.1	8.9
5 - 14	16.1	16.1	16.1	16.2	16.3	16.4
15 - 24	12.8	12.8	12.9	13.0	13.1	13.6
25 - 44	25.9	25.2	24.6	23.9	23.1	22.4
45 - 64	24.8	25.0	25.1	25.2	25.4	25.6
65 and over	11.4	11.9	12.3	12.6	13.0	13.1
Nonwhite - All Ages	100.0	100.0	100.0	100.0	100.0	100.0
Under 5	14.5	14.7	14.7	14.8	14.8	14.4
5 - 14	22.4	22.6	22.9	23.2	23.5	24.2
15 - 24	13.5	13.9	14.2	14.6	15.0	15.3
25 - 44	28.3	27.5	26.8	26.0	25.4	24.8
45 - 64	16.7	16.6	16.6	16.6	16.6	16.6
65 and over	4.6	4.7	4.8	4.8	4.7	4.7

TABLE 4

Estimated Population by Census Tract
Baltimore, Maryland
July 1, 1965

Census Tract	Estimated Population	Census Tract	Estimated Population	Census Tract	Estimated Population
1-1	5,837	8-1	6,449	12-4	4,702
1-2	5,036	8-2	5,633	12-5	4,493
1-3	3,759	8-3	8,975	12-6	3,066
1-4	2,459	8-4	3,860	12-7	4,423
1-5	3,460	8-5	6,726		
		8-6	5,929	13-1	4,623
2-1	3,714	8-7	6,773	13-2	5,708
2-2	3,194			13-3	4,717
2-3	2,755	9-1	5,190	13-4	3,918
		9-2	4,516	13-5	1,721
3-1	3,569	9-3	4,823	13-6	4,308
3-2	3,561	9-4	2,629	13-7	5,307
		9-5	2,724	13-8	6,995
4-1	785	9-6	4,198		
4-2	5,428	9-7	5,181	14-1	4,509
		9-8	7,177	14-2	6,100
5-1	3,824	9-9	6,883	14-3	7,385
5-2	3,307				
		10-1	6,904	15-1	7,111
6-1	3,948	10-2	5,130	15-2	6,303
6-2	5,210	10-3	3,000	15-3	4,895
6-3	3,982			15-4	5,690
6-4	3,013	11-1	2,296	15-5	2,014
6-5	2,281	11-2	4,414	15-6	7,501
		11-3	1,494	15-7A	2,902
7-1	3,460	11-4	2,176	15-7B	4,124
7-2	5,519			15-8A	4,771
7-3	2,946	12-1	4,304	15-8B	1,358
7-4	6,355	12-2	7,485	15-9	4,880
7-5	4,974	12-3	5,401	15-10	6,688

TABLE 4 (Continued)

Census Tract	Estimated Population	Census Tract	Estimated Population	Census Tract	Estimated Population
15-11	7,769	21-1	3,065	26-7	2,958
15-12	6,332	21-2	6,279	26-8	2,938
15-13	6,003			26-9	4,064
		22-1	1,891	26-10	3,978
16-1	4,292	22-2	1,394	26-11	3,516
16-2	4,941			26-12	800
16-3	3,530	23-1	3,911		
16-4	6,181	23-2	2,809	27-1	8,273
16-5	5,124	23-3	2,098	27-2	3,513
16-6	6,277			27-3	4,896
16-7	8,023	24-1	3,612	27-4A	7,308
16-8	8,574	24-2	3,115	27-4B	4,837
		24-3	3,613	27-5	12,000
17-1	4,310	24-4	4,163	27-6	6,492
17-2	5,424			27-7	10,397
17-3	4,906	25-1A	7,765	27-8A	19,930
		25-1B	4,577	27-8B	10,307
18-1	3,870	25-2A	14,099	27-9	14,636
18-2	4,971	25-2B	4,651	27-10	8,614
18-3	3,922	25-2C	3,464	27-11	3,107
		25-3A	4,543	27-12	7,042
19-1	4,143	25-3B	3,586	27-13	3,420
19-2	4,413	25-4	11,282	27-14	4,586
19-3	4,193	25-5	6,930	27-15	7,850
19-4	5,392	25-6	1,594	27-16	6,499
				27-17	7,123
20-1	6,506	26-1	13,478	27-18	9,588
20-2	8,851	26-2	10,985	27-19	4,911
20-3	3,871	26-3	17,464	27-20	15,141
20-4	4,259	26-4A	7,388		
20-5	5,369	26-4B	2,522	28-1A	3,688
20-6	4,621	26-5	7,288	28-1B	7,905
20-7	9,095	26-6A	9,976	28-2	5,891
20-8	2,499	26-6B	1,282	28-3	7,524
				28-4	14,581



BALTIMORE CITY HEALTH DEPARTMENT
BUREAU OF BIOSTATISTICS

QUARTERLY

STATISTICAL

REPORT

BIRTHS

MARRIAGES

MORBIDITY

MORTALITY

FOURTH QUARTER 1965
VOL. 17, NO. 4

BALTIMORE CITY HEALTH DEPARTMENT

Robert E. Farber, M.D.
Commissioner

BUREAU OF BIOSTATISTICS

Elizabeth B. Kelley, B.S.
Director

"We can judge of the perfection to which a science has come by the facility more or less great, with which it may be approached by calculation".

Quetelet

The Baltimore Quarterly Statistical Report is prepared by the Bureau of Biostatistics for the purpose of distributing to interested agencies and individuals, a quantitative and cumulative record of health conditions during the current year.

Table of Contents

	Page
A Summary of Vital Events	1 - 5
B Annual Rates by Month for Births and Selected Causes of Death	6
C Morbidity Rates by Month	7
D Average Morbidity Rates by Month	8
E Tables of Vital Events	9 - 12
I Marriages, Births, Deaths by Race	9
II Deaths From Selected Causes	10
III Cases and Deaths From Selected Causes and Infant Deaths by Health Districts	11
IV Newly Reported and Reactivated Cases of Tuberculosis, Tuberculosis Deaths, Tuberculosis Hospital Admissions and Patients Receiving Chemotherapy	12



BALTIMORE'S HEALTH RECORD IN 1965

A sharp drop in the number of resident births, an increase in low income families and of elderly individuals and record highs in the loss of lives and in the number of persons injured due to automobile accidents were the more important developments during 1965 of major consequence to the health of the city's residents. The following additional major developments were noted:

1. Diseases preventable by vaccines were kept well within control and near eradication levels. Of particular note was a fourth year free of poliomyelitis; another year without diphtheria and smallpox; one case of tetanus which terminated fatally in an unimmunized person; and a small number of reported cases of whooping cough.
2. Diseases subject to broad control programs were kept within their 1963-1964 levels of occurrence, but no significant advances were made. These diseases were tuberculosis--724 cases and 119 deaths--and the venereal diseases--348 cases of reported infectious syphilis and 5,730 cases of reported gonorrhea.
3. The loss of life among Negro infants declined by 15 per cent to a record low nonwhite infant mortality rate of 33.6 deaths per 1,000 live births.

Unfortunately, the infant mortality among white infants increased by the identical percentage of 15 per cent. No obvious answer for these conflicting trends is now available.

4. The loss of life due to cancer of the lung showed no evidence of decline even though it has been clear for years that cigarette smoking is a major cause of this disease.

Maternal and Child Health

The infant mortality rate is generally considered a sensitive index of the maternal and infant care available in a community. It is gratifying to report, therefore, that the loss of lives among Negro infants declined 15 per cent during 1965, from 39.7 infant deaths per 1,000 live births to 33.6. On the other hand, a negative development in this respect is a rise in the loss of infant lives among the newborn white infants from an infant mortality rate of 22.0 in 1964 to 25.2 in 1965. The explanation of these trends is difficult at this time. A principal factor contributing to infant mortality, namely, the frequency of premature birth, failed to show any change from the level of 16.5 per cent among nonwhite infants and 8.5 per cent among white infants.

Ten mothers died as a result of childbearing in 1965. When related to the total of 19,800 births, this is equivalent to a maternal mortality rate of five deaths per 10,000 live births, which is approximately the same rate recorded in 1964.

Tuberculosis and Venereal Diseases

As the common communicable diseases come under remarkably effective control through vaccines permitting near eradication of these conditions, tuberculosis and the venereal diseases stand out as peculiarly difficult and expensive problems to overcome. In both instances the record for 1965 would seem to suggest that present programs are not able to affect the long range trends of these diseases. This interpretation does not imply criticism of the efforts of the substantial group of workers dedicated to the care of patients with tuberculosis or to the care of cases of infectious syphilis. It is intended to direct attention to the underlying causes of these diseases as they arise today. In the instance of tuberculosis, the major fraction of existing disease is found among individuals who come from deprived economic or social circumstances and who are inclined to disregard common principles of good personal hygiene. As social conditions improve, there is every reason to believe that tuberculosis will disappear as a disease of public significance, an event which has already occurred in communities where impoverished social and economic conditions are rarely found.

The recent trend in tuberculosis and in the principal venereal diseases is shown below.

<u>Tuberculosis</u>			<u>Venereal Diseases</u>	
<u>Year</u>	<u>New Cases</u>	<u>Deaths</u>	<u>Infectious Cases of Syphilis</u>	<u>Gonorrhea Cases</u>
1965	724	119	348	5,730
1964	710	96	410	5,534
1963	796	129	421	5,256
1962	780	133	384	4,972
1961	749	148	381	5,981

Motor Vehicle Accidents

Following the statewide trend, Baltimore City's motor vehicle accident toll ran a disastrous pace. Record peaks were reached in both the total number of accidents and the number of personal injuries. The number of persons injured in May of this year reached an unprecedented monthly total of 1,286, compared with 1,031 last year in May.

In order to stimulate more effective comprehension of this problem the following facts should be noted.

1. Over half of the persons killed in motor vehicle accidents were pedestrians.
2. Approximately one fourth, or 3,100 personal injuries, were of a serious nature and required the victim to be carried from the scene.
3. The types of accidents that are increasing the most are motor vehicles colliding with other vehicles, up 34 per cent in 1965, and motor vehicles colliding with fixed objects, up 27 per cent compared with 1964.
4. All but an insignificant fraction of the collisions were due to driver error, or flagrant violation of traffic laws.

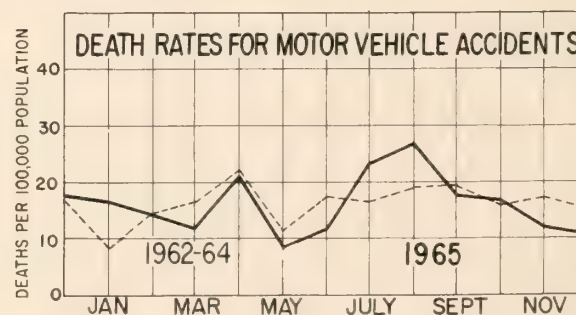
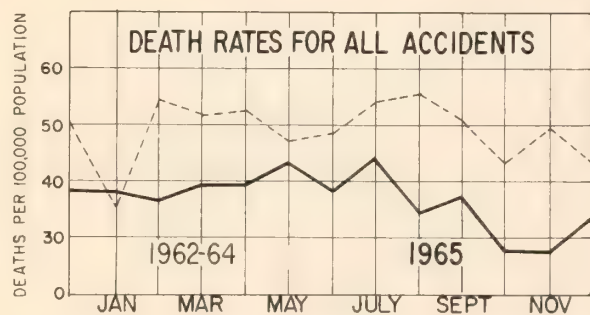
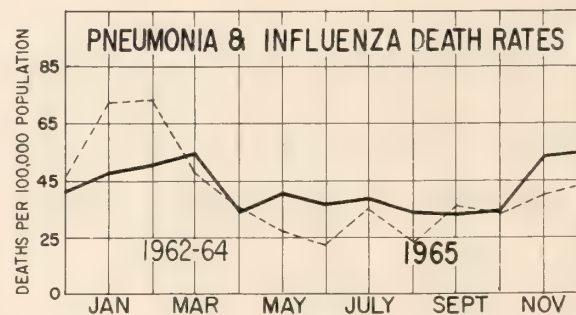
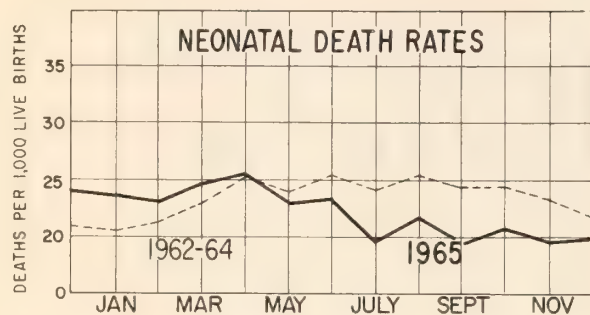
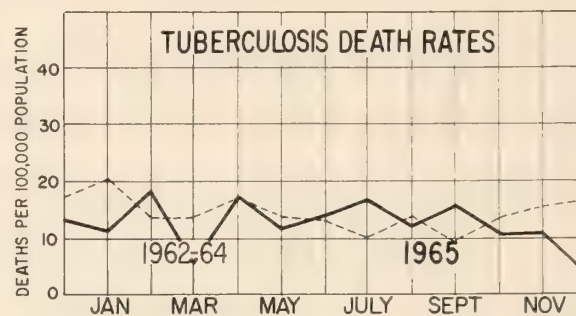
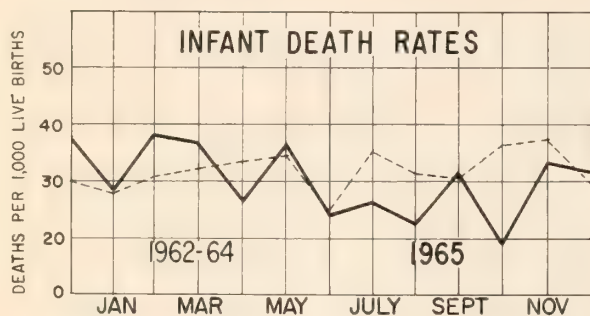
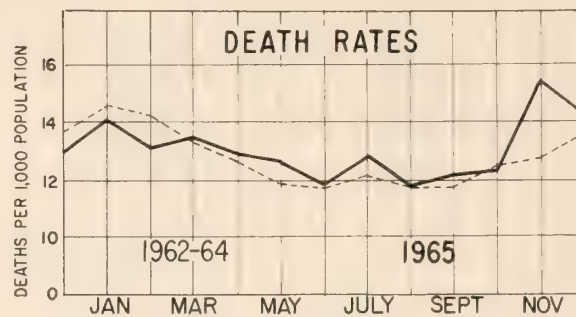
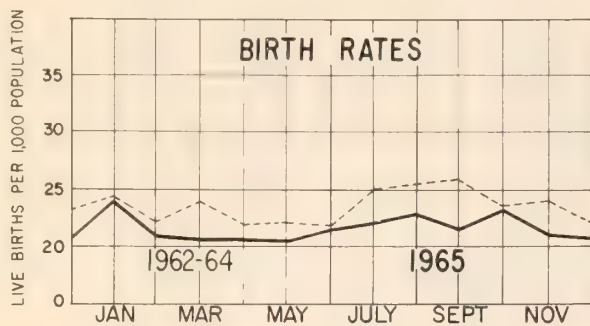
Recent trends in automobile accidents in Baltimore City are shown in the accompanying table.

<u>Year</u>	<u>Accidents Reported</u>	<u>Persons Injured</u>	<u>Persons Killed Within Baltimore City</u>
1965 (Est.)	23,850 (+ 9%)	13,460 (+24%)	120 (+15%)
1964	21,807	10,875	104
1963	20,235	9,857	116
1962	18,736	8,854	106
1961	17,535	8,237	91

Principal Causes of Death

The total resident death rate was 12.5 per 1,000 population or approximately the same as in 1964. There was a small increase in the white death rate associated with conditions prevalent in older age groups and an increase in accidental deaths and a small decline in the nonwhite death rate.

During 1965, 4,708 residents died as a result of heart disease giving a rate of 512.9 deaths per 100,000 persons which is slightly lower than the rate for 1964. Cancer accounted for 1,989 deaths, 88 more than in 1964, and vascular lesions of the central nervous system caused 888 deaths, 71 more than in 1964. These three causes of death accounted for 66 per cent of all resident deaths.



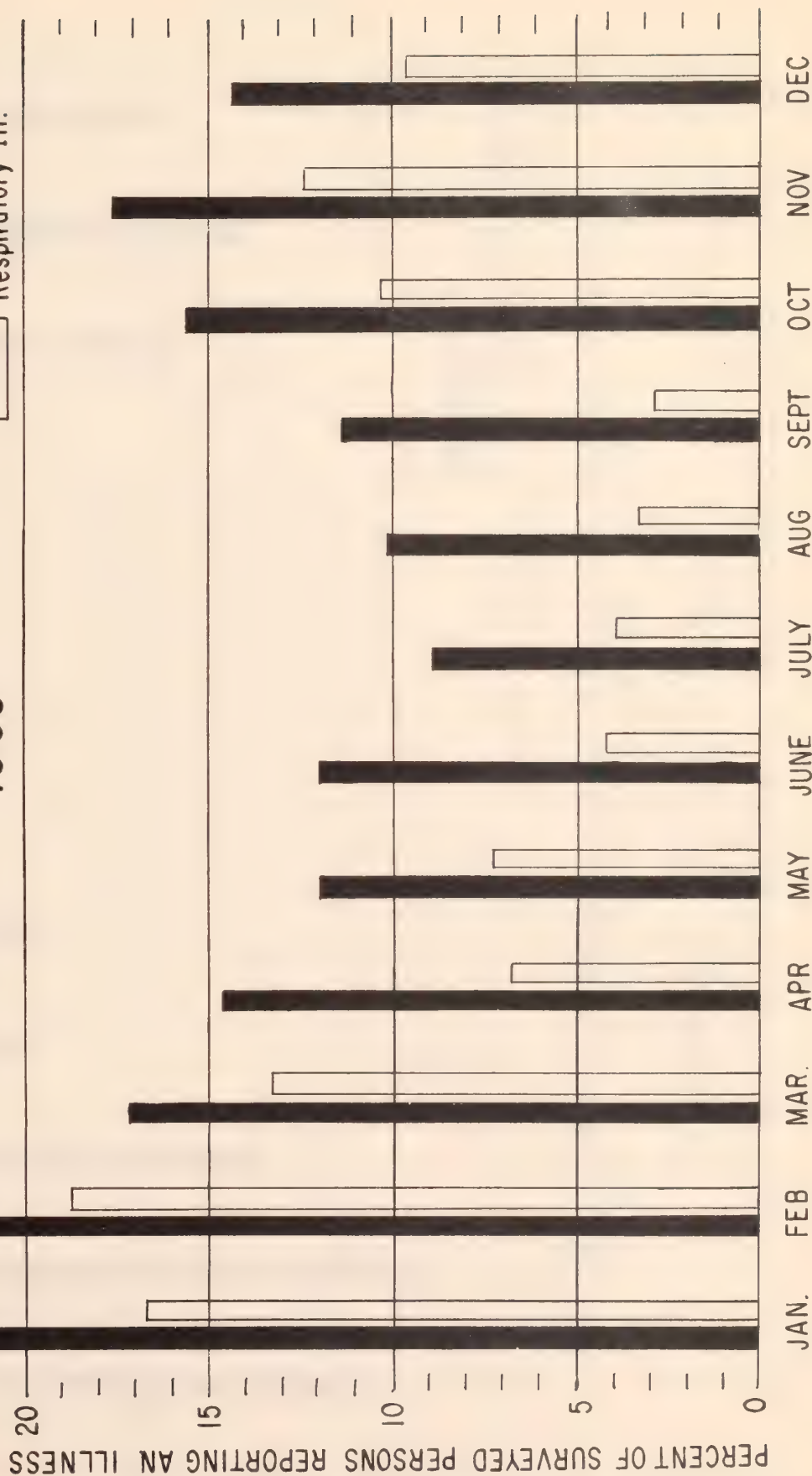
BALTIMORE CITY HEALTH DEPARTMENT

BALTIMORE HEALTH SURVEY

MORBIDITY AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

1965

■ All Illness
□ Respiratory Ill.



BALTIMORE CITY HEALTH DEPARTMENT

BALTIMORE HEALTH SURVEY

MORBIDITY DUE TO ACUTE RESPIRATORY ILLNESS
AS REPORTED IN 100 HOUSEHOLD INTERVIEWS (275-325 PERSONS) BY MONTH

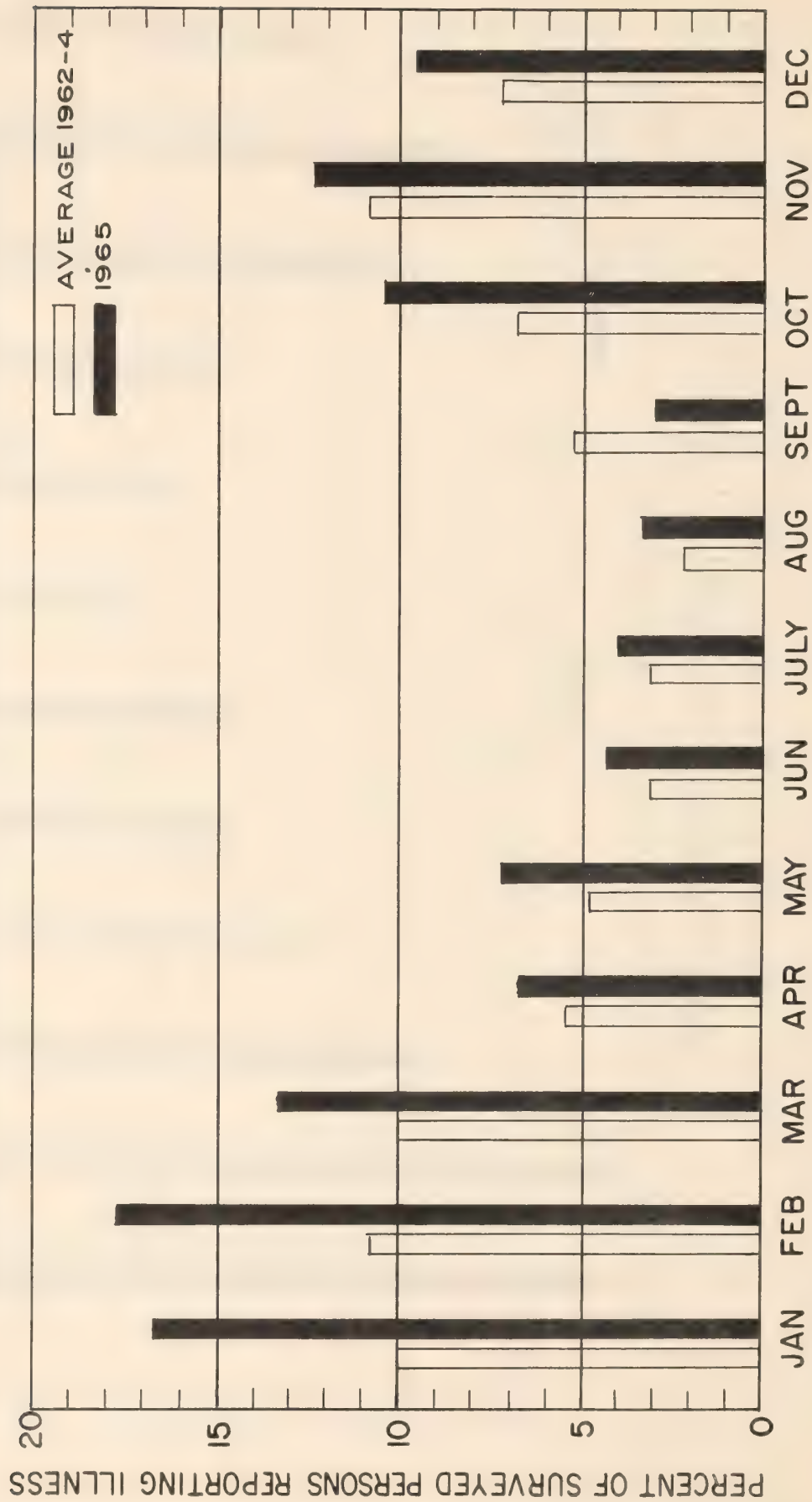


TABLE I

Marriages Recorded, Resident Births, Deaths and Infant Deaths
and Corresponding Rates by Race: Fourth Quarter, 1965 and 1962-1964

Vital Event	OCTOBER-DECEMBER				JANUARY-DECEMBER	
	Number		Rate*		Rate*	
	1965	Average 1962-64	1965	Average 1962-64	1965	Average 1962-64
ALL RACES						
Marriages recorded.....	2,403	2,318	10.4	9.9	11.1	10.2
Births.....	5,022	5,478	21.7	23.5	21.8	23.8
Deaths, all causes.....	3,225	2,982	13.9	12.8	13.1	12.6
Deaths, under one year.....	137	180	27.3	32.9	29.1	31.8
under 28 days.....	99	127	19.7	23.2	21.8	23.7
28 days-11 months...	38	53	7.6	9.7	7.3	8.1
WHITE						
Marriages recorded.....	1,507	1,473	10.9	10.2	11.8	10.6
Births.....	2,441	2,769	17.7	19.2	17.7	19.4
Deaths, all causes.....	2,249	2,015	16.3	14.0	15.0	12.4
Deaths, under one year.....	64	67	26.2	24.2	26.0	24.0
under 28 days.....	44	50	18.0	18.1	19.1	18.4
28 days-11 months...	20	17	8.2	6.1	3.9	5.6
NONWHITE						
Marriages recorded.....	896	845	9.3	10.1	10.1	9.6
Births.....	2,581	2,709	27.7	32.4	28.0	30.9
Deaths, all causes.....	976	967	10.5	11.6	10.2	10.6
Deaths, under one year.....	73	113	28.3	41.7	32.1	39.7
under 28 days.....	55	77	21.3	28.4	24.4	29.0
28 days-11 months...	18	36	7.0	13.3	7.7	10.7

*Infant mortality rates are per 1,000 live births. All other rates--marriage, birth and death--are on an annual basis per 1,000 population estimated as of July 1, 1965. Total, 918,000; White, 548,000; Nonwhite 370,000.

TABLE II

Resident Deaths From Selected Causes
Fourth Quarter, 1965 and 1962-1964

Cause of Death	OCTOBER-DECEMBER				JANUARY-DECEMBER	
	Number		Rate Per 100 000*		Rate Per 100 000*	
	1965	Average 1962-64	1965	Average 1962-64	1965	Average 1962-64
All Causes	3,025	3,006	13.1	12.9	12.9	12.7
Tuberculosis (001-019).....	19	36	8.2	15.4	12.1	14.4
Syphilis (020-029).....	4	7	1.7	3.0	2.9	4.0
Cancer (140-205).....	534	479	230.8	205.2	229.5	208.3
Diabetes mellitus (260)	75	72	32.4	30.8	37.6	32.6
Vascular lesions of the central nervous system (330-334).....	236	220	102.0	94.3	93.2	90.6
Diseases of the heart (410-443)	1,232	1,295	532.4	554.8	519.5	544.6
Influenza and pneumonia (480-483, 490-493).....	110	85	47.5	36.4	42.6	41.1
Cirrhosis of liver (581)	84	53	36.3	22.7	30.7	21.8
Nephritis and nephrosis (590-594)	20	22	8.6	9.4	8.3	9.0
Puerperal causes (640-652, 670-689)	5	2	2.2	0.9	1.0	1.0
Congenital malformations (750-759).....	33	34	14.3	14.6	13.0	14.0
Certain diseases of early infancy (730-773)	87	112	37.6	48.0	42.1	48.8
Suicides (963, 970-979).....	20	23	8.6	9.9	9.6	10.4
Homicides (964, 980-999).....	45	36	19.4	15.4	14.5	13.3
Accidents (800-802, 810-835, 840-962).....	63	104	27.2	44.6	36.2	48.3
Motor vehicles (810-835)...	30	38	13.0	16.3	15.9	16.3

*Rates shown for all causes are per 1,000 population

TABLE III

CASES AND DEATHS FROM SELECTED CAUSES AND INFANT DEATHS BY HEALTH DISTRICTS
FOURTH QUARTER, 1965 AND 1962-1964 AVERAGE

Cause of Illness and Death	*Total City		Eastern		Western		Druid		Southeastern		Southern	
	1965	Average 1962-1964	1965	Average 1962-1964	1965	Average 1962-1964	1965	Average 1962-1964	1965	Average 1962-1964	1965	Average 1962-1964
Infant deaths	137	178	50	53	25	45	26	42	19	20	16	18
Tuberculosis, All Forms	179 13	180 35	42 2	59 9	48 5	44 7	44 4	39 8	24 3	24 5	21 2	14 4
Syphilis	421 4	387 6	114 1	97 2	112 1	93 0.6	144 2	141 2.7	19 0	24 0.5	31 0	26 0
Infectious hepatitis	62 0	43 1	19 0	13 0.7	23 0	7 0.3	9 0	4 0	7 0	12 0	4 0	7 0
Lead paint poisoning	7 0	8.3 0	1 0	3 0	4 0	3 0	1 0	2 0	0 0	0 0	1 0	0.3 0
Whooping cough	7 0	7 0.3	5 0	5 0.3	1 0	0.3 0	1 0	1.7 0	0 0	0 0	0 0	0 0
Meningococcal infections	10 2	2 1.3	5 1	0.3 0	3 1	0.3 0.3	1 0	1.4 0	1 0	0 1	0 0	0 0
Measles	229 0	139 0	79 0	72 0	49 0	17 0	56 0	39 0	31 0	25 0	7 0	15 0
Acute polio- myelitis (paralytic)	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

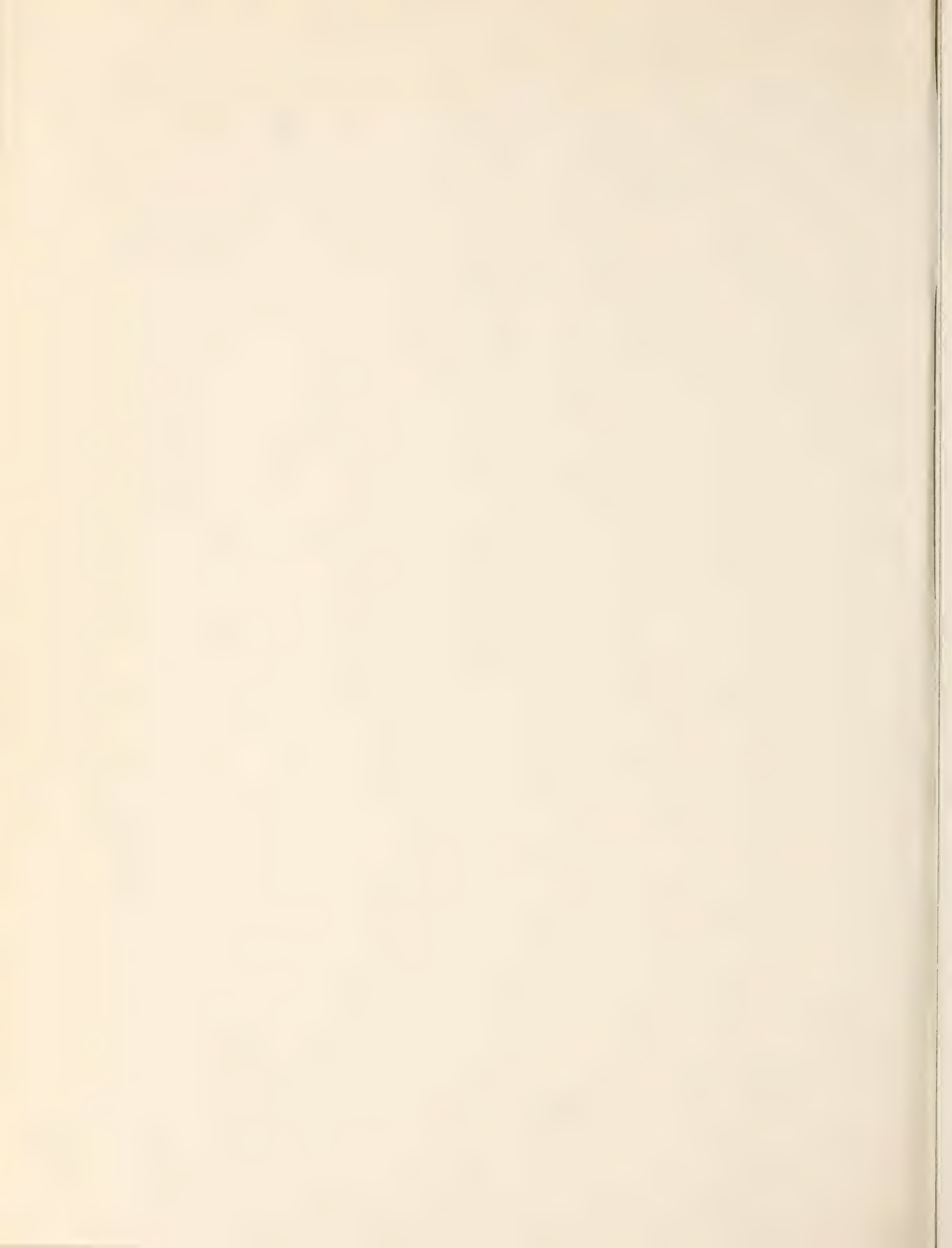
All figures corrected for residence within Maryland.

*Totals include some intransfers allocated to Baltimore City but not otherwise allocated to health districts.

TABLE IV

Newly Reported and Reactivated Cases of Tuberculosis,
Tuberculosis Deaths, Tuberculosis Hospital Admissions
and Patients Receiving Chemotherapy
Fourth Quarter, 1965 and 1964

	OCTOBER-DECEMBER		JANUARY-DECEMBER	
	TOTAL		TOTAL	
	1965	1964	1965	1964
Newly Reported Cases.....	179	158	743	713
White.....	75	76	303	306
Nonwhite.....	104	82	443	407
Number of Readmissions.....	17	19	82	106
White..	5	9	44	56
Nonwhite..	12	10	38	50
Number of Tuberculosis Deaths.	17	22	106	91
White.....	7	11	55	44
Nonwhite	10	11	51	47
Number of Patients Admitted to Tuberculosis Hospitals	144	144	599	620
Number of Patients on Chemotherapy			2,760	2,678



MARYLAND & RARE BOOK ROOM
UNIVERSITY OF MARYLAND LIBRARY
COLLEGE PARK, MD.

UNIV. OF MD COLLEGE PARK



3 1430 04038641 1

DO NOT CIRCULATE

